

# Rail Transit State Safety Oversight Program Procedures & Standards March 2015 Revision

**Utah Department of Transportation** 

4501 South 2700 West Salt Lake City UT 84114

Procedures & Standards	
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### **Table of Contents**

Tab	le of Contents 3
1.	Revision Table
2.	Authority and Scope
3.	Definitions & Acronyms
4.	Program Management
5.	UDOT Program Standard Development
6.	Internal Safety and Security Audits15
7.	UDOT Safety & Security Audits
8.	Accident/Incident Notification and Reporting
9.	Accident Investigation Procedures
10.	Hazard and Risk Management Program41
11.	Corrective Actions
12.	Other UDOT Reviews
13.	Standard for Rail Transit Agency System Safety Program Plan and Security and Emergency
Prej	paredness Plan(s)54
App	endix A: Selected State Legislation60
App	endix B: FTA Rule 49 CFR Part 65963
App	endix C: 49 United States Code Section 5329(e)
App	endix D: SSPP & SEPP Review and Approval Checklists80

### 1. Revision Table

Revision Date	Description of Revisions
October 1999	Original issue of System Safety and Security Program Standards
October 1999	Original issue of <i>Program Procedures</i>
March 2003	Updated Program Procedures
August 2005	Combined Program Procedures and System Safety and
	Security Program Standards into this one document.
	Updated content to comply with Federal Transit
	Administration revised State Safety Oversight Final Rule, as
	issued April 29, 2005.
September 2005	Draft revision of Procedures & Standards document to
	comport with UDOT comments from 22 Sept 2005.
January 2006	First official revision of combined Procedures & Standards
	issued to Utah Transit Authority safety and security managers,
	with copies to Federal Transit Administration and Federal
	Railroad Administration
August 2006	Draft revision of Procedures & Standards document to comport with FTA comments from 18 June 2006.
May 2009	Draft revision of Procedures & Standards document to
	comport with FTA comments from February 2009 audit of
	UDOT SSO Program.
April 2012	Revision of Procedures and Standards in accordance with
	changes to UDOT SSO program and UTA organizational
	structure
April 2013	Minor revisions for clarification
March 2015	Expansion of accident investigation, auditing, and Corrective
	Action Plan procedures, with additional revisions for
	implementation of MAP-21 requirements and guidance.

### 2. Authority and Scope

#### 2.1. Authority Under 49 CFR Part 659

In 49 CFR Part 659, the Federal Transit Administration (FTA) requires states with defined rail fixed guideway systems (including light rail and heavy rail transit, monorails, trolleys, etc.) to conduct safety and security oversight of those systems. In the State of Utah, the Utah Department of Transportation (UDOT) is the designated agency for safety and security oversight of rail fixed guideway safety systems.

The system safety and security processes revolve around a System Safety Program Plan (SSPP) and Security and Emergency Preparedness Plan(s) (SEPPs) respectively. This document – the UDOT State Safety Oversight Program Procedures and Standards – describes the minimum content that UDOT requires for these two documents, as well as associated procedures for reviewing those plans and assessing their implementation. The overall objectives of UDOT's State Safety Oversight (SSO) Program are to reduce the potential for safety and security incidents and to increase awareness of safety and security. UDOT's State Safety Oversight Program is intended to address these and related objectives and goals in a proactive manner, with the belief that preventing accidents and incidents through reasonable measures is preferable to reacting to them after they occur.

As of this revision of the UDOT Standards and Procedures, there is one rail fixed guideway system under the jurisdiction of UDOT's State Safety Oversight Program. This is the Utah Transit Authority's (UTA) TRAX Light Rail Transit System. The rail fixed guideway system is also referred to as the "transit agency" or "transit system" in this document.

This document is not intended to encompass all operational and administrative practices and procedures associated with UDOT's State Safety Oversight Program, but as additional formal procedures or standards are developed, they will be added to this document and distributed to rail fixed guideway systems under the jurisdiction of UDOT's SSO program.

#### 2.2. Authority Under 49 U.S.C. 5329(e)

In October 2012, the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (hereafter "MAP-21"), which includes new provisions for State Safety Oversight agencies, including UDOT, became effective. MAP-21 creates a new regulatory role for the states implementing SSO programs for the rail transit fixed guideway systems in their jurisdictions.

Explicit mandates in 49 U.S.C. 5329(e)(3) and 5329(e)(4) now require a State to obtain enforcement authority for its SSO agency that administers SSO programs for the rail transit agencies in that State. States must provide their SSO agencies with this authority as a condition of the receipt of Federal grant funds apportioned under 49 U.S.C. chapter 53. In addition, each State must identify the specific authorities and capabilities that it will use to enforce 49 U.S.C. Section 5329(e) provisions in order to maintain its eligibility for Federal public transportation funding. FTA will evaluate each state's approach and determine its sufficiency.

FTA has determined that most States require additional enforcement authority to meet 49 U.S.C. 5329(e) provisions. UDOT has begun working to implement the provisions of MAP-21, which will strengthen the oversight program by ensuring the legal and financial independence of the

oversight agency, providing specific authority to enforce program requirements and to compel action by the covered transit agencies, and to conduct audits, inspections, and field measurements, among other new requirements.

As of this version of the Procedures and Standards, and until full implementation of the provisions of MAP-21, all of the requirements of Part 659 will remain fully effective. Part 659 will remain enforceable until three years after the FTA promulgates the pending final rulemaking for MAP-21. In advance of the final rulemaking, this version of the UDOT Procedures and Standards includes enhancements to state safety oversight program implementation activities.

#### 2.3. Program Participants and Roles

The FTA's State Safety Oversight Final Rule delineates the responsibilities of the state (Utah), the rail safety oversight agency (UDOT), the transit agency (UTA) and the FTA in implementing the state safety oversight program. A brief overview of these responsibilities and roles follows:

**The State:** The primary responsibility of the state is to designate an oversight agency to oversee the safety of any fixed guideway system that is:

- 1. Included in FTA's calculation of fixed guideway route miles or receives funding under FTA's formula program for urbanized areas (49 U.S.C. 5336);
- 2. Not regulated by the Federal Railroad Administration. (As explained on the previous page, TRAX Light Rail System is subject to FRA jurisdiction and FTA state safety oversight.)

UTA is the transit agency in Utah that meets these criteria.

**The Oversight Agency:** As the oversight agency, UDOT is required to develop and adopt a system safety program standard, a document that establishes the relationship between the oversight agency and transit agency and specifies the requirements which the transit agency must follow. The system safety program standard is to include minimum requirements for (1) safety practices to reduce the likelihood of unintentional events that may lead to death, injury, or property damage, and (2) security practices to reduce intentional wrongful or criminal acts, such as muggings, rapes, murders, assaults, or terrorist activities.

Other (minimum) responsibilities of UDOT include:

- Requiring the transit agency to develop a SSPP and SEPPs that complies with the UDOT's system safety and security program standard.
- Reviewing and approving, as necessary, the transit agency's SSPP and SEPPs and determining whether they should be updated.
- Requiring the transit agency to conduct safety audits and security reviews as a constant activity and submitting an annual audit report to UDOT for review.
- Conducting on-site safety and security reviews every three years (at a minimum) to assess whether the transit agency's safety and security practices and procedures comply with its SSPP and SEPPs.
- Requiring the transit agencies to report the occurrence of defined accidents and hazards.

- Investigating reports of accidents and hazards and requiring the transit agencies to prepare corrective action plans to minimize, control, correct, or eliminate the accidents and hazards.
- Reporting annually, and as requested, to the FTA with respect to oversight activities.

**The Transit Agency:** All rail fixed-guideway public transit systems within the state of Utah are subject to the oversight program described herein. This includes systems currently operating, as well as systems in the design, engineering, and construction phases. A transit agency subject to the State Safety Oversight Rule must develop and implement an SSPP and SEPPs that comply with UDOT's system safety and security program standard. In addition, the transit agency's responsibilities include:

- Conducting safety and security audits and submitting to UDOT an annual report summarizing the results of the transit agency's internal safety and security audit process.
- Identifying and classifying hazards.
- Reporting any accident or hazard in accordance with the procedures outlined in the Accident and Hazard Notification section of this document.
- Conducting accident and hazard investigations on behalf of UDOT when directed to do so.
- Preparing corrective action plans and then implementing the plans so as to minimize, control, correct, or eliminate the hazard or conditions that have caused an accident.

The Federal Transit Administration: The FTA assesses whether the State has complied with the Rule or has made adequate efforts to comply with the Rule. If the FTA determines that the State is not in compliance or has not made adequate efforts to comply, it may withhold up to five percent of the amount apportioned for use in the State or affected urbanized areas under FTA's formula program for urbanized areas (formerly section 9). Also, FTA receives reports from the oversight agency.

The Federal Railroad Administration: While the FRA does not have a formal role in state safety oversight, it is the regulatory agency for railroads that are part of the United States 'general railroad system.' Because the trunk of UTA's Mainline (the portion between 10000 South/Beetdiggers and Ballpark/1300 South is shared track, used by both railroad trains and transit trains, the FRA has regulatory jurisdiction over that portion of the UTA's TRAX line. This means that UTA must comply with FRA regulations with respect to operations, equipment, maintenance, etc., or receive a specific waiver from FRA for any regulations UTA and FRA agree cannot be met or are not necessary.

Additionally, the FRA's jurisdiction over part of the UTA TRAX system means that UTA must file certain FRA-mandated reports. Finally, the FRA's involvement compels both UTA and UDOT to maintain a high level of coordination and communication with the FRA in order to ensure that the State Safety Oversight Program and process are appropriate and transparent.

### 3. Definitions & Acronyms

The following definitions and acronyms are the most important entries for this document. These may be copied and added to for plans and documents created in accordance with the standards below.

Accident means any incident meeting the following criteria:

- 1. A fatality at the scene; or where an individual is confirmed dead within thirty (30) days of a rail transit-related incident;
- 2. Injuries requiring immediate medical attention away from the scene for two or more individuals;
- 3. Property damage to rail transit vehicles, non-rail transit vehicles, other rail transit property or facilities and non-transit property that equals or exceeds \$25,000;
- 4. An evacuation due to life safety reasons;
- 5. A collision at a grade crossing;
- 6. A derailment:
- 7. A collision with an individual on a rail right of way; or
- 8. A collision between a rail transit vehicle and any other vehicle

**Final Rule** refers to the State Safety Oversight of Rail Fixed Guideway Systems regulations promulgated by the Federal Transit Administration and defined at 49 CFR Part 659.

**Contractor means** an entity that performs tasks required on behalf of the oversight or rail transit agency. The rail transit agency may not be a contractor for the oversight agency.

**Corrective action plan** means a plan developed by the rail transit agency that describes the actions the rail transit agency will take to minimize, control, correct, or eliminate hazards, and the schedule for implementing those actions.

**FRA** means the Federal Railroad Administration, an agency within the U.S. Department of Transportation.

**FTA** means the Federal Transit Administration, an agency within the U.S. Department of Transportation.

**Hazard** means any real or potential condition (as defined in the rail transit agency's hazard management process) that can cause injury, illness, or death; damage to or loss of a system, equipment or property; or damage to the environment.

**Individual** means a passenger; employee; contractor; other rail transit facility worker; pedestrian; trespasser; or any person on rail transit-controlled property.

**Investigation** means the process used to determine the causal and contributing factors of an accident or hazard, so that actions can be identified to prevent recurrence.

**New Starts Project** means any rail fixed guideway system funded under FTA's 49 U.S.C. 5309 discretionary construction program.

**Oversight Agency** means the entity, other than the rail transit agency, designated by the state or several states to implement this part. In particular for this document, Oversight Agency refers to the Utah Department of Transportation's State Safety Oversight Program.

**Passenger** means a person who is on board, boarding, or alighting from a rail transit vehicle for the purpose of travel.

**Passenger Operations** means the period of time when any aspect of rail transit agency operations are initiated with the intent to carry passengers.

**Program Standard** means a written document developed and adopted by the oversight agency, that describes the policies, objectives, responsibilities, and procedures used to provide rail transit agency safety and security oversight.

**Rail Fixed Guideway System** means any light, heavy, or rapid rail system, monorail, inclined plane, funicular, trolley, or automated guideway that:

- (1) Is not regulated by the Federal Railroad Administration; and
- (2) Is included in FTA's calculation of fixed guideway route miles or receives funding under FTA's formula program for urbanized areas (49 U.S.C. 5336); or
- (3) Has submitted documentation to FTA indicating its intent to be included in FTA's calculation of fixed guideway route miles to receive funding under FTA's formula program for urbanized areas (49 U.S.C. 5336).

Rail Transit Agency means an entity that operates a rail fixed guideway system.

**Rail Transit-Controlled Property** means property that is used by the rail transit agency and may be owned, leased, or maintained by the rail transit agency.

**Rail Transit Vehicle** means the rail transit agency's rolling stock, including but not limited to passenger and maintenance vehicles.

**Safety** means freedom from harm resulting from unintentional acts or circumstances.

**Safety Management System** means a method of identifying hazards and controlling risks in a work and operational environment that continually monitors these methods for effectiveness.

**Security** means freedom from harm resulting from intentional acts or circumstances.

**SEPP** means the Security and Emergency Preparedness Plan(s), one or more documents developed and adopted by the rail transit agency describing its security and emergency

preparedness policies, objectives, responsibilities, and procedures. Although this may involve more than one document (i.e. Emergency Preparedness Plan, System Security Plan, etc.), they are collectively referred to in the Procedures and Standards as the SEPPs.

**SSPP** means the System Safety Program Plan, a document developed and adopted by the rail transit agency, describing its safety policies, objectives, responsibilities, and procedures.

**State** means a State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands.

**UDOT** means the Utah Department of Transportation

**UTA** means the Utah Transit Authority, an agency which provides transit service in the Salt Lake City, Utah area, and which operates the TRAX Light Rail Transit System covered under UDOT's State Safety Oversight Program

### 4. Program Management

#### 4.1. Ongoing Coordination with Transit Agencies

UDOT will conduct meetings and correspond with transit agencies' safety and security representatives as needed. UDOT will conduct formal status meetings with UTA safety department representatives once each quarter (every three months). More frequent meetings may be conducted if needed, based on current events.

UDOT personnel will meet with other transit agency personnel regarding operations, maintenance, inspections, facilities and infrastructure, and other safety- and security-critical topics as needed to facilitate UDOT's safety and security reviews. UDOT develops and maintains a coordination schedule showing UDOT's expected quarterly meetings with transit system, transit system internal safety and security audits, UDOT external audits, and similar activities.

UDOT's meetings and correspondence with transit agencies are intended to ensure ongoing communications between UDOT and the transit agency, such that both groups appreciate the other's perspective and needs. Ongoing communications also help to ensure the best possible safety and security programs for all parties involved as more attention paid to these types of issues will mean fewer unexpected problems.

#### 4.2. Conflict of Interest

No party or entity may provide services to both the state oversight agency and the rail transit agency when there is a conflict of interest, as defined by the State of Utah. UDOT's Program Manager will have the final determination as to what relationships between an entity/party and the rail transit agency may constitute or appear to constitute a conflict of interest.

#### 4.3. UDOT Reporting to FTA

In conformity with the FTA State Safety Oversight rules, UDOT must make specific, initial, annual, and periodic reports to the FTA. All submissions to FTA must be submitted electronically using a reporting system specified by FTA. The objective of these reporting requirements is to provide the FTA with information regarding the operation of the State of Utah's state safety oversight program. These reporting requirements are identified as follows.

*Initial submission*. The following information, contained in UDOT's initial submission to the FTA, must be updated as necessary.

- 1. The name and address of UDOT's State Safety Oversight Program Manager
- 2. The name(s) and address(es) of the transit agency or agencies subject to UDOT jurisdiction under this part; and
- 3. A written description of UDOT, including the following information:
  - a. A copy of its system safety program standard (includes security portion);
  - b. Its procedures or process for reviewing and approving the transit agency's SSPP;

- c. Its investigatory procedures for accidents and hazards; and
- d. Its procedures for ensuring that appropriate corrective actions have been taken by the transit agency to correct, eliminate, minimize, or control investigated hazards.

Annual submission. Before March 15 of each year (or an alternate date selected by the FTA), UDOT must submit to the FTA:

- A publicly available report summarizing its oversight activities for the preceding twelve months, including a description of the causal factors of investigated accidents, status of corrective action plans, updates and modifications to rail transit agency program documentation, and the level of effort used by the oversight agency to carry out its oversight activities.
- A report documenting and tracking findings from UDOT Three-Year Safety and Security Audit activities and whether a Three-Year Safety and Security Audit has been completed since the last annual report was submitted.
- Program standard and supporting procedures that have changed during the preceding year.
- Certification that any changes or modifications to the transit agency SSPP or SEPPs have been reviewed and approved by the oversight agency.
- A letter from the transit agency General Manager certifying compliance with the system safety and security program plans, including reference to activities to address any areas of non-compliance identified through the internal safety/security audit process, and the UDOT safety/security review. (This requirement is described in Section 6 of this document).

Annual certification. Certification signed by UDOT Program Manager/Director certifying compliance with 49 CFR Part 659. UDOT must maintain a signed copy of this annual certification to FTA, subject to audit by FTA.

*Periodic submissions*. Status reports of accidents, hazards, and corrective action plans must be forwarded to the FTA upon request.

#### 4.4. UDOT Reporting to Executives

UDOT provides biannual reports to the UTA Board of Trustees and annual reports to the Governor of the State of Utah. These presentations include updates on changes to SSO program implementation, completed audits and significant findings, recent accident/incident investigations, and data on Corrective Action Plans.

### **5.UDOT Program Standard Development**

The portions of this document that dictate the minimum content of system safety and security program plans – referred to as UDOT's Procedures and Standards – are developed and maintained as follows:

#### 5.1. Development

This revision of the UDOT Procedures and Standards is a product of the original UDOT System Safety and Security Program Standards, originally issued in 1999, and of the changes required when the FTA revised the SSO Final Rule in April 2005. [The original UDOT Standards were based on the original FTA SSO Final Rule, on the American Public Transportation Association's Manual for the Development of SSPPs, and on industry best practice.] UDOT has updated and will continue to revise the Procedures and Standards based on enhanced enforcement, investigative, safety plan, and other requirements under MAP-21.

#### 5.2. Revision

The UDOT Procedures and Standards will be reviewed as-needed by UDOT State Safety Oversight Program staff, and will be updated at least once every two years. Any updates required by FTA rules or audits, as well as any improvements suggested by changes in industry best practices, will be added during this revision process. In addition, UDOT will continue to discuss its Procedures and Standards with rail transit system personnel, and where possible, will incorporate any suggested changes that enhance safety or security, or facilitate rail transit system compliance with this document.

When the UDOT SSO Program Manager determines it to be appropriate and/or necessary, UDOT will provide a draft of the UDOT Procedures and Standards revisions and seek comments from transit agency safety and security managers.

When immediate changes to this document are needed, UDOT may issue interim changes or amendments to transit agency managers in written form, to be followed by complete revised Program Procedures and Standards that incorporate the changes.

#### 5.3. Procedures and Standards Approval and Implementation

Drafts of the UDOT Procedures and Standards will be reviewed and approved by the UDOT SSO Program Manager before they are officially adopted and distributed to covered transit agencies.

#### 5.4. Distribution

Revisions to this document will be distributed directly to the rail transit agency managers in charge of safety and security. Typically these managers will be system safety administrators, the Chief Safety Officer, and the Chief of Police. UDOT will distribute the revised Procedures and Standards immediately following approval by the UDOT SSO Program Manager.

#### 5.5. Pending Changes Resulting from MAP-21

A critical change prescribed by MAP-21 will be a shift from the current structure of SSO programs, including the SSPP and this Procedures and Standards, to one based on safety management systems (SMS), which are currently in use throughout the aviation industry and other transportation modes. SMS is a comprehensive model for collecting and analyzing safety data, proactively addressing hazards at the lowest levels in a system, and working collaboratively with all levels of transit system employees to ensure a robust safety culture that emphasizes safety performance and examining root causes for preventing future hazards. In addition to these characteristics, an SMS plan is composed of four primary sections, each addressing a separate subject area, and twelve elements within these four sections. While some of these sections introduce new material and safety principles, many areas are reflected in the current UDOT Procedures and Standards structure as well. Thus, many of the activities currently in place in UDOT's SSO program can be relatively easily adapted to SMS.

In response to the final rulemaking that will put MAP-21 into effect, UDOT will require UTA to implement SMS throughout its organization. This process will not be immediate and will require significant changes in safety function activities as well as operational monitoring of safety performance and collaboration with the UTA Safety Department personnel. As such, UDOT will maintain its SSO requirements for UTA under Part 659 during this transition period, including SSPP and SEPP implementation.

### **6.Internal Safety and Security Audits**

UDOT requires the transit agency to develop and document a process for the performance of ongoing internal safety and security audits to assess implementation of the SSPP and the SEPPs. Each year at a time agreed upon by UDOT and the transit agency, the transit agency must submit to UDOT a schedule of safety and security internal audits, including an outline for audit activity over course of the entire year. Within the course of each three year cycle, the transit agency must audit the implementation of all of the provisions of the SSPP (21 elements) and the SEPPs (7 elements).

The internal safety and security audit program must, at a minimum:

- 1. Determine if all identified elements of its SSPP (21 elements) and SEPPs (7 elements) are performing as intended;
- 2. Determine if hazards, vulnerabilities, and other safety and/or security issues are being identified in a timely manner; and
- 3. Ensure that all elements of the SSPP and SEPP are reviewed in an ongoing manner and completed over a three-year cycle.

UDOT requires that the transit agency internal safety and security audit program be conducted on an ongoing basis. A condensed audit schedule whereby all internal audit activities are condensed into one large audit does not adhere to the intent of this requirement and will not be acceptable. Rather, internal safety and security audits must be spread over several months each year. The methodology by which all of the required safety and security program elements are audited will be at the discretion of the transit agency, so long as internal safety and security audit activities take place at least annually. The rail transit agency must notify the oversight agency at least 30 calendar days before conducting internal safety and security audits. The transit agency must also provide written checklists and procedures for each audit, at least 30 calendar days before on-site audit activity. Alternatively, checklists and procedures may also be submitted en masse at the beginning of the year. After the first completion of an audit for which UDOT has received the checklist and procedure, only new or revised documents are required to be submitted to UDOT.

The internal safety and security audits must be performed by transit agency personnel who are independent from the function being audited. A lack of such independence constitutes a potential conflict of interest.

The transit agency has the ability to incorporate regular and ongoing system safety and security activities into the internal safety and security audit program. Such activities include, but are not necessarily limited to, hazard and vulnerability assessments, records reviews, spot checks of maintenance compliance, and checks of employee compliance with operating rules and procedures.

#### 6.1. Safety and Security Audit Items

UDOT requires the internal safety and security audits conducted by the rail transit agency to include the items listed below, which include all of the elements from the SSPP and SEPPs. These elements must be audited at least once during the three year cycle. Please refer to Appendix D: SSPP & SEPP Review and Approval Checklists for more detailed discussion of each audit element.

Please note that the internal safety and security audit program is designed to oversee and monitor the *implementation* of the provisions described in the SSPP and the SEPPs, and *not the documents themselves*.

The transit agency must put forth a level of effort for each of the elements below commensurate with the depth and complexity of that element. For example, the review of Safety Element 4, Plan Review and Modification, could be conducted as a "paper audit," comprised of interviews with appropriate Safety staff responsible for the review and modification of the SSPP. In contrast, the review of Safety Element 15, Maintenance Audits and Inspections, comprises all of the transit agency's maintenance programs, including, but not necessarily limited to:

- rail vehicles,
- signal systems,
- traction power and overhead catenary systems, and
- track

In order to meet the intent of the internal audit requirement for more complex safety program elements, such as Element 15, the audit must be composed of interviews with pertinent managers, reviews of records to ensure maintenance programs are being conducted in accordance with applicable standards and requirements, and field verification of maintenance. As such, the audit of Element 15 alone must be fairly resource-intensive. UDOT will not accept an internal audit of Element 15 or similar elements that are solely composed of a single meeting or "paper audit."

#### **Safety Audit Items**

- 1. Policy Statement.
- 2. Purpose, Goals and Objectives.
- 3. Management Structure.
- 4. Plan Review and Modification.
- 5. Plan Implementation.
- 6. Hazard Management Process.
- 7. Safety Certification Process.
- 8. System Modifications.
- 9. Safety Data Acquisition.
- 10. Incident Notification, Investigation, and Reporting.
- 11. Emergency Management Program.
- 12. Internal Safety Audit Program.

- 13. Rules Compliance.
- 14. Facilities and Equipment Inspections
- 15. Maintenance Audit and Inspection Program.
- 16. Training and Certification Program.
- 17. Configuration Management Process.
- 18. Compliance with Local, State, and Federal Safety Requirements.
- 19. Hazardous Materials Program.
- 20. Drug and Alcohol Program.
- 21. Procurement.

#### **Security/Emergency Preparedness Audit Items**

- 1. Policy Statements.
- 2. System Description.
- 3. Management of the System Security Program.
- 4. System Security Program Components.
- 5. Threat and Vulnerability Identification, Assessment and Resolution
- 6. Implementation and Evaluation of the System Security Program Plan
- 7. Modification of the SEPP

#### 6.2. Transit Agency Safety and Security Audit Reports

UDOT requires the transit agency to complete an audit report for each internal safety and security audit. The report must include the completed checklists used to conduct the audit, a description of the audit process, a list of documents reviewed, persons interviewed, and findings of noncompliance. For each such finding, the transit agency must develop a formal Corrective Action Plan, as described in this document in Section 11. Individual audit reports must be provided to UDOT within 30 days of completion.

Each year, the transit agency must submit to UDOT a report of all safety and security internal audits performed in the previous calendar year. The final written report must be submitted to UDOT on or before February 15<sup>th</sup> of each year. The safety and security annual reports may be provided separately if more convenient. If the security audit report contains security-sensitive information, the transit agency may request that UDOT review the report on-site only. Individual reports previously submitted as completed need not be re-submitted, but should be referenced on

the transit agency's annual report as being part of the internal audit process. The report(s) must include the following elements:

- A summary of corrective actions generated by each audit.
- The status of each corrective action plan.
- A list of all audits included in the original schedule for the year, indicating dates each audit was completed, or identifying the audit as incomplete.
- A summary of significant audit findings.
- A status report summarizing hours of service requirements for the year.
- A statement by the agency's chief executive or general manager certifying compliance with the SSPP and security and emergency preparedness plans, or identifying areas of noncompliance and activities the rail transit agency will undertake to achieve compliance.

Within 30 calendar days of receipt, UDOT will issue a written response either approving or rejecting the annual safety and security audit report. If UDOT rejects the report, the transit agency will have 15 days to address noted deficiencies and requested changes in the report and submit a revised report to UDOT. UDOT, at its discretion or the transit agency's request, may arrange for a meeting with the transit agency to discuss the noted deficiencies and requested changes.

If the annual safety and security audit report is accepted by UDOT, then no further actions relative to the annual safety and security audit report will be required by UDOT for that annual period. UDOT may require other information or analysis which relates to the safety and security audit process, as part of some other aspect of the state oversight program.

In the event the transit system objects to a noted deficiency or requested change from UDOT it shall state its objections and suggest alternatives within 5 calendar days. UDOT and the transit agency shall review the objections and suggested alternatives and agree to an appropriate course of action within 15 calendar days. The revised and updated report shall be submitted to UDOT for review and approval within 30 calendar days after agreement on a course of action.

The Annual Safety and Security Audit Report may be delivered to UDOT in a format agreed to by the UDOT Program Manager (electronic or hard copy). Once approved, a final version of the report must be submitted in an unalterable format with all required approval signatures visible.

### 7. UDOT Safety & Security Audits

#### 7.1. Overview of External Safety and Security Audits

The UDOT State Safety Oversight Program uses structured triennial audits required by 49 CFR Part 659 as well as ongoing meetings and periodic, smaller audits to accomplish its safety and security oversight objectives. UDOT may conduct audits and special studies of issues related to the safety and security of the rail transit system at its discretion. In addition to the general audit areas listed below, UDOT may initiate an audit of a particular subject matter area in response to a particular accident, incident, near-miss, hazard, or trend/pattern in a safety-related area. Such audits and studies may result in UDOT-issued findings that shall be subject to the Corrective Action Plan process outlined in Section 11.

#### 7.2. UDOT Audit Procedures and Reporting

The procedure outlined below applies to all safety and security audits performed by UDOT. Onsite audits will generally be structured as follows:

- UDOT State Safety Oversight Program personnel (possibly including contractors) will
  work with rail transit system safety and security personnel to identify a convenient
  period of time for on-site audit activities. UDOT and transit system personnel will
  work together to schedule sessions for each of the major audit topics.
- 2. UDOT will request and review the most recent plans, procedures, and other important documents related to the transit system operation or process at hand. UDOT will request that UTA submit documents at least 30 days before the audit begins (a shorter time period may be required for certain audits conducted under exigent circumstances).
- 3. UDOT will formulate appropriate agendas, checklists, and/or guides for on-site audit activities and submit them to UTA for information on the audit's scope.
- 4. UDOT will conduct an entrance briefing and an exit briefing. Each will be open to all affected transit system managers. UDOT will use the first meeting to detail its project schedule and methodology. The exit meeting will include a discussion of audit findings to date.
- 5. On-site audits will consist of the following activities:
  - a) UDOT will interview transit system managers, and in some cases front-line personnel in charge of implementing the areas under review.
  - b) UDOT will review written program plans, procedures, and policies to determine their completeness and as a basis for evaluating program compliance.
  - c) UDOT will audit records wherever applicable. This specifically applies to personnel training, operations rules checks, hours of service, preventive maintenance inspections, and drug and alcohol testing. The record sample size and timeframe will depend on the topic audited, but will always include a sample of records from the most recent year.
  - d) UDOT will conduct field observations of facility, infrastructure, or operations conditions wherever applicable, to determine the presence of hazards and/or

compliance with rules and procedures. This may include observations of personnel work underway (such as observation of a vehicle inspection).

6. UDOT will issue a draft audit report within 30 days of completion of the audit. UDOT will seek comment from transit system personnel on that draft. Comments will be due to UDOT 15 calendar days after initial receipt of the draft report. UDOT will issue a final report within 15 calendar days of the end of the comment period, based on transit system personnel comments (as needed). Transit system personnel will be required to respond to audit findings as part of the ongoing corrective action plan process (described in Section 11).

#### 7.3. Triennial Safety and Security Audits

In accordance with the FTA's SSO Final Rule (Part 659.29), UDOT's State Safety Oversight Program must, "[a]t least every three years ... conduct an on-site review of the rail transit agency's implementation of its SSPP and SEPP." Additionally, pursuant to 49 U.S.C. 5329(e)(4)(A)(vi), the SSO must "[audit,] at least once triennially, the compliance of the rail fixed guideway public transportation [system]...with the public transportation agency safety plan." For the purposes of this program, the referenced safety plan will comprise the transit agency SSPP. This section provides information on UDOT's on-site safety and security audits and related activities.

The Triennial Safety and Security Audit process is intended as an independent evaluation of transit system operations and should allow UDOT to determine if the system is following its own system safety and security procedures. Key objectives are as follows:

- 1. Determine if the SSPP is being followed by the transit system.
- 2. Determine if the system security program plan is being followed by the transit system.
- 3. Determine if hazards are being identified in a timely manner.
- 4. Determine effectiveness of transit system's internal safety and security review process.

UDOT, using its own personnel and/or authorized contractors, will conduct on-site safety and security audits of the covered transit agencies' implementation of its system safety and security programs. The on-site audit will include an evaluation of all safety- and security-critical elements identified in the transit system's SSPP, SEPPs, and related documents and procedures. During its audit, the UDOT State Safety Oversight Program will also evaluate certain elements of any FRA Joint Use Waiver agreements that may be in place at the time. Each area will be audited to determine whether or not the transit system is carrying out its safety and security plans and programs. Additionally, the audit will seek to identify any areas where the transit system could improve safety and security, or where modifications to the safety or security programs may be necessary.

Specific operational, safety, and security elements that will be evaluated during the audit include:

- System Safety Program Plan elements:
  - 1. Policy Statement and Authority for SSPP
  - 2. Goals and Objectives
  - 3. Overview of Management Structure

- 4. SSPP control and Update Procedure
- 5. System Safety Program Implementation Activities and Responsibilities
- 6. Hazard Management Process
- 7. Safety Certification
- 8. System Modification
- 9. Safety Data Collection and Analysis
- 10. Accident/Incident Investigations
- 11. Emergency Management Program
- 12. Internal Safety Audits
- 13. Rules Compliance
- 14. Facilities and Equipment Inspections
  - a. Stations Maintenance
  - b. Maintenance Facility Safety and Equipment
- 15. Maintenance and Inspection Programs
  - a. Structural Maintenance
  - b. Elevator Maintenance
  - c. Communication System Maintenance
  - d. Track Maintenance
  - e. Signals Maintenance
  - f. Railcar Maintenance
  - g. Traction Power Maintenance
- 16. Training and Certification Programs
- 17. Configuration Management and Control
- 18. Employee and Contractor Safety Program
- 19. Hazardous Materials Programs
- 20. Drug and Alcohol Program
- 21. Procurement Process
- Security/Emergency Preparedness Program Plan elements
  - 1. Security/Emergency Preparedness Programs Purpose, Goals & Objectives, Scope, Authority
  - 2. Accuracy of the conditions written in the System Description
  - 3. Security/Emergency Preparedness Management Activities
  - 4. Security/Emergency Preparedness Programs Components
  - 5. Threat & Vulnerability Identification, Assessment and Resolution

- 6. Implementation and Evaluation of the Security/Emergency Preparedness Programs
- 7. Security and Emergency Preparedness Plans Review and Modification

UDOT will identify two types of findings during its Triennial Safety and Security Audits:

- Findings of Non-Compliance: A finding of non-compliance refers to an instance where UTA is not operating in compliance or accordance with an applicable internal or external written requirement, including, but not limited to, 49 CFR Part 659, 49 U.S.C. 5329(e); the transit agency's SSPP; the transit agency's SSP, and referenced UTA plans, policies, and procedures. Some non-compliance findings may be safety- or security-critical in nature; however, some findings may be related to a deficiency in the content or material reviewed.
- Findings of Compliance with Recommendation: A finding of compliance with recommendation refers to a condition whereby UTA may technically be in compliance with applicable internal and external requirements; however, there may be no appropriate written plan, policy, or procedure in place, or the existing plan, policy, or procedure is not appropriate, or is not written in accordance with applicable industry practices or adopted standards. Alternatively, such a finding of compliance with recommendation may constitute a resource or organizational issue preventing the allocation of sufficient resources to system safety or security activities.

#### 7.4. Audit Procedures Related to FRA Jurisdiction

The rail transit system currently covered under the UDOT State Safety Oversight Program is UTA's TRAX Light Rail Transit System. Because TRAX shares part of its trackage with freight operations (operating at different times of day), the light rail line is subject to Federal Railroad Administration regulation. UTA has operated its TRAX service under an FRA Joint Use Waver agreement, which exempts TRAX from certain regulations, and changes the reporting and monitoring of other regulations. This agreement between UTA and FRA includes certain functions to be fulfilled by UDOT's State Safety Oversight Program. This includes particular attention in the following audit areas:

- Inspection, testing, and maintenance of brake equipment of TRAX LRV vehicles. As part of its triennial audit, UDOT will carefully review maintenance procedures and practices regarding the LRV brakes. This review will assess whether the LRV brakes are maintained in an equivalent level of safety as that achieved through compliance with Section 229.46-229.59 of CFR 49 for conventional commuter rail equipment. UDOT will submit copies of its Triennial Audit Final Report to the FRA.
- Hours of Service procedures and compliance. Traditionally transit agencies have not required hours of service limitations for safety-critical employees. While this practice is changing and transit agencies are implementing hours of service limitations, UTA is statutorily required to implement FRA regulations regarding hours of service limitations. UDOT will audit UTA's hours of service practices and records for LRV operations and dispatching compliance with these regulations. UDOT will audit hours of service compliance on at least an annual basis and send its report to the FRA.

• Operator qualification and training requirements. As part of its triennial audit, UDOT will review UTA's operator qualification and training requirements to ensure all operators are being trained in an appropriate, thorough, and consistent manner. UDOT will assess re-certification training and additional training due to absences and rule violations and determine whether UTA is appropriately following their own training practices and procedures. UDOT will submit copies of its Triennial Audit Final Report to the FRA.

### 8. Accident/Incident Notification and Reporting

The UDOT State Safety Oversight Program is required to investigate all accidents meeting the criteria described in the Accident & Hazard Notification section of its Procedures & Standards. The following is a brief overview of the standards and procedures that rail transit agencies are to follow when conducting accident investigations. In accordance with Federal Transit Administration requirements, UDOT "must investigate, or cause to be investigated, at a minimum" all reportable accidents (49 CFR Part 659.35). In order to fulfill this requirement, and to accomplish investigation of other important events including hazards and incidents, UDOT has developed the following procedure.

#### 8.1. Notification Requirements

#### 8.1.1. Threshold for Notification to UDOT

UDOT requires the rail transit agency to notify UDOT within two hours of any accident/incident involving a rail transit vehicle or taking place on rail transit-controlled property when one or more of the following occurs:

- A fatality at the scene; or where an individual is confirmed dead within 30 days of a rail transit-related incident;
- Injuries requiring immediate medical attention away from the scene for two or more individuals;
- Property damage to rail transit vehicles, non-rail transit vehicles, other rail transit property or facilities and non-transit property that equals or exceeds \$25,000;
- An evacuation due to life safety reasons (including self-evacuations and maintenance-related offloads into the track area);
- A collision at a grade crossing:
- A main-line derailment;
- A collision with an individual on a rail right of way; or
- A collision between a rail transit vehicle and any other vehicle.

#### 8.1.2. Procedures for Notification to UDOT

If any accident occurs that meets the criteria in section 8.1.1 above, the transit agency must notify UDOT's State Safety Oversight managers, by text message and email at the same time UTA key personnel are notified. UTA will also notify the UDOT Traffic Operations Center (TOC) by email (<a href="mailto:TC-Controlroom@utah.gov">TC-Controlroom@utah.gov</a>) at this same time. UTA will then follow up with State Safety Oversight, in person or by phone within two (2) hours of the accident's occurrence and provide the following information:

- a. Caller's name, transit agency, and contact phone number
- b. Time and date of accident
- c. Type of incident
- d. Location and direction of travel of incident
- e. Transit vehicles and any other vehicles involved

- f. Number of persons injured and requiring medical attention away from the scene and number of fatal injuries
- g. Estimated property damage
- h. Status of investigation by transit system and any other investigating agencies, and whether or not the accident has been or will be reported to another oversight agency such as FRA or NTSB
- i. Other details that would describe the accident

If State Safety Oversight cannot be reached within the two-hour period, then UTA will call the UDOT TOC at 801-887-3700 (open 24 hours) and report the above information on the accident. As part of its tracking/analysis of hazards, UDOT may periodically request more detailed reports or summaries of accidents, including those which do not meet the accident reporting threshold.

#### 8.1.3. Notification of Other Security-Related Incidents

All incidents meeting the description of the FBI Uniform Crime Reporting (UCR) Parts I & II Incidents must be reported to the UDOT Program on a monthly basis. Transit agencies should file a report listing such incidents, which should be transmitted before the 5<sup>th</sup> of each month for the preceding month's incidents. A monthly report already provided to upper-level UTA management, the federal government, or other agencies may satisfy this requirement. The report may be delivered to UDOT in a format agreed to by the UDOT Program Manager (electronic or hard copy).

#### 8.1.4. Notification of Hazards to UDOT

The transit agency shall provide UDOT with notification of Hazards according to the requirements set forth in Section 10 of this document (Hazard Management Program).

#### 8.1.5. Protocols for Reporting Accidents to Other Agencies

Accident reporting to other oversight agencies such as the FRA, NTSB, National Transit Database, et al, may be required. The requirements of this document do not obviate other reporting obligations.

#### Reportable to FTA

Any serious injury and/or fatal accident/incidents that are required to be reported to UDOT within two hours of the occurrence should also be reported to FTA by the transit agency with the same information listed section 8.2.1 above.

All accidents/incidents that meet the criteria of National Transit Database shall be sent to the National Transit Database by the transit agency. Any other minor but reportable to FTA accidents shall be recorded by the transit agency and entered into the UTA's accident database for inventory and annual report purposes.

#### Reportable to NTSB

Notification of any major accidents/incidents that meets the requirement of reportable threshold for the NTSB shall be sent to the NTSB by the transit agency within the NTSB's

specified timeframe. The transit agency shall ask NTSB within 3 days after the accident/incident occurrence whether NTSB intends to investigate the accident/incident and inform UDOT about NTSB's decision.

#### Reportable to FRA

The light rail tracks from south of 1300 South to 10000 South are shared line with the Union Pacific and UTA. Therefore, FRA has jurisdiction over this segment of tracks. Notification of any serious injury and/or fatal accidents that occur within this segment and meet the reportable threshold for the FRA shall be sent to FRA by the transit agency within the timeframe established by FRA. For any and all accidents/incidents that are subject to FRA notification requirements, the transit agency shall also notify UDOT as outlined in 8.2.1.

#### 8.2. Investigation and Reporting Requirements

The purpose of accident investigation is to gather and assess facts in order to determine cause(s); and to identify corrective measures to prevent recurrence. The UDOT State Safety Oversight Program's accident investigation will occur according to one of the following models (or, less frequently, a combination of these models):

- 1. Transit agency authorized to conduct investigation;
- 2. UDOT conducts investigation;
- 3. Other oversight agency conducts investigation; or
- 4. Joint investigation of UDOT and transit agency.

#### 8.2.1. Transit Agency Authorized to Conduct Investigation

Unless UDOT decides to conduct its own investigation (and informs the rail transit agency of that decision), UDOT formally authorizes the rail transit agency (UTA) to conduct its own investigation of the accident and utilize that accident investigation to serve as the UDOT investigation. An authorized representative of UDOT may also participate as a member of the transit agency's accident investigation team or committee. UDOT representative(s) may also attend the accident review meetings.

In conducting an accident investigation, the rail transit agency must provide the materials listed below to UDOT on the following schedule:

- 1. Preliminary Verbal Report: Basic information about the reportable accident must be transmitted verbally to UDOT during the notification process, as described in the UDOT's current <u>Accident Notification</u> procedure.
- 2. Preliminary Written Report: As soon as possible after the incident, but within 3 business days the transit agency must fax, email, or hand deliver preliminary written information, including any accident investigation summary information, preliminary reports from field personnel, and other available information.
- 3. Investigation Status Report: UDOT may, at its discretion, request from the transit agency a report indicating the status of the investigation, including any significant

new reports or report components, and any preliminary investigation conclusions within 10 days of the accident.

4. Final Accident Report: At the conclusion of its investigation, and within 30 days of the accident, the transit agency safety department must transmit to UDOT a final accident report. If the transit agency requires additional time to complete its investigative activities, then it shall request additional time from UDOT. UDOT will work with the transit agency to close open accidents with consideration of needed investigative processes, including (but not limited to) transportation investigations, derailment reports, police investigations, medical examiner reports and other required materials to close an accident investigation.

Upon the completion of the accident investigation process, the transit agency will submit a draft final accident investigation report to UDOT. UDOT will review this report and either accept it, or require specific additional information from the transit agency. UDOT will notify the transit agency in writing of its approval of the report or of required revisions. If revisions are required, the time frame for revising the report will be determined jointly by UDOT and the transit agency, on a case-by-case basis. In reviewing the accident investigation report UDOT will ensure that the report has:

- 1. Description of the accident including a clear sequence of events before, during, and after the accident
- 2. Description of investigation process and methodology
- 3. Description of the post accident testing and research conducted
- 4. Conclusions (including findings and identified causal and contributing factors)
- 5. Corrective action plan (outlined in "Corrective Action Plans" section)
- 6. Supporting analysis to defend recommendations in report
- 7. Recommendations

After UDOT approval of the draft accident investigation report, by signing the report as adopted, a copy of the final signed and adopted report will then be returned to UTA's Safety Administrator.

Accident reports may be delivered to UDOT in a format agreed to by the UDOT Program Manager (electronic or hard copy). However, once a report has been adopted by UDOT, the transit agency must submit a copy to UDOT in an unalterable format (electronic or hard copy) with all required approval signatures visible.

#### 8.2.2. UDOT Conducts Investigation

UDOT, at its discretion, and depending upon the particular circumstances of the accident, may choose to conduct an investigation of the accident utilizing its own personnel or a UDOT-authorized contractor. At a minimum, UDOT will conduct its own investigation when the integrity of a UTA investigation could be called into question due to a real or perceived conflict of interest. In such cases, UDOT will conduct a thorough, unbiased inquiry and expect cooperation and assistance from UTA personnel.

All UDOT-authorized accident investigation personnel are granted authority under the Utah State Safety Oversight program to conduct an investigation and evaluate records, materials, data, analysis, equipment, and other information which is pertinent to the investigation. It is expected that the transit agency will provide to the UDOT investigation team the resources and information necessary to conduct the investigation in an effective and efficient fashion. UDOT's complete procedures for accident investigation and reporting are contained in Section 9.

In some cases, UDOT will not conduct its own investigation but may decide to designate itself as a party to UTA's full investigation. Under this arrangement, UDOT will not produce its own investigation report but may respond to the accident scene and will participate in UTA investigation activities and meetings. UDOT will, at a minimum, join UTA investigations resulting from any fatalities where the suspected manner of death is not suicide.

#### 8.2.3. Other Oversight Agency Conducts Investigation

Depending on the accident, another oversight agency such as the FRA, NTSB, National Transit Database, et al, may conduct an investigation of the accident utilizing its own procedures and personnel. UDOT and the transit agency will provide to the investigation team the resources and information necessary to conduct the investigation in an effective and efficient fashion. UDOT must review the other oversight agency's final report and formally adopt it as its own or prepare its own report.

#### 8.2.4. Joint Investigation of UDOT and Transit Agency

The transit agency and UDOT may choose to conduct a joint investigation of the accident. The transit agency and UDOT may use the transit agency's procedures, UDOT's procedures, or a combination of the two procedures to investigate the accident. The procedures to be used must be established prior to the investigation and agreed upon by both the transit agency and UDOT.

#### 8.3. Transit Agency Accident Investigation Procedures

The transit agency must submit its formal accident investigation procedures to UDOT, when initially produced and following any updates, for review and approval. These procedures must be contained or referenced in the transit agency's SSPP. The transit agency's accident investigation procedures must also contain adequate detail to guide the investigation process, and must, at a minimum, contain the categories of information included in Section 9 of the UDOT Procedures and Standards, which is based upon APTA-RT-SOP-002-02, *Standard for Rail Transit Accident/Incident Investigation*.

### 9. Accident Investigation Procedures

The following are the procedures that UDOT will use in the event that it conducts an independent accident investigation. In most cases, the transit agency will conduct the investigation on behalf of UDOT. As such UDOT is required to formally approve the transit agency's accident investigation procedures. These procedures, based on the American Public Transportation Association (APTA) Procedure APTA-RT-SOP-002-02, Standard for Rail Transit Accident/Incident Investigation, will be modified as necessary based on the circumstances of each individual accident investigation. The transit agency's investigation procedures must contain adequate information to investigate the incident, and as such must include, at a minimum, the categories of information contained in this Appendix.

#### 9.1. Initial UDOT Response

If UDOT elects to conduct an independent accident investigation, it will notify the transit agency of this decision, and will request that the accident scene or materials be held, if needed.

If UDOT's accident investigation will occur parallel to a transit agency field investigation, UDOT will inform the transit agency's on-scene commander as to the name and contact information of UDOT's Lead Investigator. The UDOT Lead Investigator will initiate, coordinate, and conduct an independent on-site investigation of accidents/incidents. If the scene cannot be secured, or if UDOT's decision to conduct an independent investigation comes after the scene has been cleared, UDOT may request certain measurement and field data from the transit agency.

The UDOT Lead Investigator may also elect to utilize data from the transit agency's investigation, including technical data for which the transit agency has greater expertise or access. UDOT also may seek corroboration or verification of certain transit agency data, depending on its nature and source.

Examples of technical data or expertise that UDOT may acquire from outside sources such as the transit agency include inspection, testing, and operational assessment of the following:

- Signals
- Track
- Power
- Communications
- Vehicle and Equipment

#### 9.2. Accident/incident on-site data development

The UDOT Lead Investigator's four objectives when initially responding to an accident scene will be:

• To secure the scene and work with transit agency personnel to ensure mutually agreeable procedures and evidence collection.

- To preserve short term and long term physical evidence.
- To develop preliminary sequence of events to determine what happened.
- To identify employees, passengers, and other eyewitnesses to obtain preliminary statements and contact information.

Once an event occurs, short term information becomes quickly perishable as an accident scene is recovered (e.g. equipment or obstructions are moved or re-arranged, equipment controls are repositioned, witnesses disappear, etc.) The primary task of on-site data collection is to prioritize the retrieval of such perishable information.

#### 9.2.1. Photographs of the scene

Upon arrival on the accident scene, the UDOT Lead Investigator will arrange to have the scene photographed as soon as possible from a panoramic view, preferably before the accident scene is disturbed. This panorama should include camera photographic shots of the involved vehicle(s) in full view, nearby infrastructure features, and any evident significant obstructions, objects, or conditions. If possible, accident scene photographs should be taken using a '4 point compass' method. The entire scene should be photographed from multiple vantage points. The photographer should attempt to provide sufficient depth-of-field to show relative positioning of objects and subjects for later comparison with diagrams.

Arrange to have specific objects or subjects photographed as soon as possible from both normal periphery and close-up views, preferably before the accident scene is disturbed. The photographer should attempt to ensure appropriate depth-of-field to sufficiently record subject material. These photographs should attempt to include, at a minimum:

- Each vehicle involved, exterior four sides, including number
- Each vehicle involved, interior compartment
- Each vehicle involved, operating control compartment
- Resting position of wheels if off track, including evidence of sanding
- All visible points of vehicle damage
- Evidence of wheel marks on rail
- All visible points of infrastructure damage
- Any visibly evident contributing obstructions, objects, or conditions
- Position of casualties, if stationary
- Any other subject that appears out of the ordinary

#### 9.2.2. General information upon arrival

- Location, including as many specifics as possible such as mileposts, catenary pole numbers, grade crossing or interlocking name, etc.
- Date and time of occurrence
- Time of arrival of UDOT Lead Investigator
- Visibility (dawn, day, dusk, dark)
- Weather (clear, cloudy, rainy, foggy, snowing, sleeting)
- Approximate temperature
- Status of transit agency investigation and incident command

#### 9.2.3. Eyewitness information

Obtain eyewitness information as quickly as possible. Information should include:

- Name, address, telephone number
- Witness category (employee, passenger, bystander, etc.)
- Status of witness (observer or principal involved in accident)
- Brief description or account of what was or was not observed

#### 9.2.4. Vehicle condition at scene

Document the damage and condition of the vehicle(s), including the following:

- Car body condition (visible damage)
- Positions of all operator controls (controller & brake handles, headlight and other switches, air gauge readings, etc.)
- Wheels/axles/trucks/sanders
- Brake systems friction, electric (dynamic), track
- Door positions or other entry/exit location conditions
- Headlights, marker lights, indicator lights status

#### 9.2.5. Vehicle dynamics

Document evidence relative to vehicle travel/speed to include, as a minimum, the

#### following:

- Work with transit system personnel to ensure event log data (where in service) is secured
- Identify wheel marks on track
- Identify evidence of sanding
- Identify evidence indicating area of contact/collision
- Determine line-of-sight distances
- Ensure arrangement to secure recorded communication data

#### 9.2.6. Infrastructure and environmental conditions

Document the damage and condition of the infrastructure and environmental conditions. Checklist items should include, at a minimum, the following:

- Damage (observable) to track, signals, bridges, structures, buildings, other infrastructure equipment or machinery
- Damage (observable) to crossing protection apparatus, if relevant
- Roadway approaches, visible pedestrian approaches (unauthorized or otherwise), if relevant
- Evidence (observable) of recent environmental alteration (washout, landslide, etc.)
- Evidence (observable) of recent miscreant alteration (vandalism)
- Point of Derailment, Collision, or Other Incident

#### 9.2.7. Diagramming the scene

Sketch the scene, as appropriate, regarding the relative location of track(s), vehicle(s), signals, equipment, apparatus, buildings, bridges, other structures. Include noteworthy landmark features, such as roadways, waterways, pathways, flora, etc. Diagram alignment should be relative to geographic north.

#### 9.2.8. Measuring the scene

Indelibly mark points of reference in the field (e.g. paint or chalk markings). Document the correlation of points of reference with resting positions of objects or subjects. Use feet as a standard unit of measure.

#### 9.2.9. Casualty factors

Document the current status of all known casualties, including:

- Injuries total number, personal information (if possible)
- Fatalities total number, personal information (if possible)
- Identification of responder units that treated or transported casualties
- Identification of hospitals where casualties were transported

#### 9.2.10. Toxicological factors

UDOT Procedures, and the Federal Transit Administration (49 CFR Part 655, "Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations") require the transit agency to conduct toxicological testing.

Inquire with transit agency supervision as to which individuals will be tested. Note these as well as any other personnel involved in the incident that will not be tested.

#### 9.3. Accident/incident off-site data collection

Once the accident scene data have been obtained, the UDOT Lead Investigator may inform the transit agency incident commander that UDOT no longer requires the scene held. The UDOT Lead Investigator should commence with off-site data collection, including:

- Gathering any remaining applicable non-perishable data.
- Gathering any interim research and analysis of data collected on scene.
- Outlining any possible preliminary incident causes or contributing factors.

In the aftermath of an accident, long term information that is non-perishable must be collected (e.g. operational speeds and conditions, maintenance and inspection records, damage estimates, etc.) The primary task of off-site data collection is to coordinate documentation to support evaluation of system, vehicle, and employee performance.

#### 9.3.1. Coordination and provision of technical assistance/expertise

Coordinate needed post-accident research and analysis with the transit agency and any other response agencies that may be involved in the accident. The UDOT Lead Investigator may rely on transit agency personnel for specialized technical support as needed.

#### 9.3.2. Vehicle and component performance

#### Inspections/tests

The UDOT Lead Investigator will coordinate with UDOT personnel or contractor personnel to conduct and/or review post-accident inspections/tests on vehicles as needed to determine if pre-existing conditions contributed to the accident. Applicable components to be tested should include, as a minimum, the following:

- Operator controls
- Wheels/axles/trucks/sanders
- Braking systems friction, electric (dynamic), track
- On-board signal/speed control systems
- Communication system
- Lights
- Whistle/horn/gong

#### Vehicle test specifications

Obtain any necessary specifications, manufacturer's test values, etc., to verify that data shown on the vehicle inspection(s) are appropriate and within tolerances.

#### Maintenance history

Research and obtain prior maintenance history of vehicle or vehicles to determine if any significant conditions or performance levels existed prior to the accident. Identify relevant maintenance protocols and recommended maintenance/inspection frequency. Identify actual maintenance and inspection activities performed as documented in maintenance files. Photocopy records if possible, or record important data such as the dates performed, results, anomalies, etc.

#### Data comparison

Compare systems performance data (inspections/tests, maintenance history) vs. prescribed engineering limits/specifications to determine if there were any contributing factors to the accident.

#### 9.3.3. Vehicle dynamics

#### Event log data

Work with transit agency personnel to obtain and interpret event log data to determine actual vehicle performance prior to and at the time of the event.

#### Communication data

Recover recorded radio or other communication data to determine if flow of information is of significance.

#### 9.3.4. Infrastructure system performance

#### Inspections/tests

The UDOT Lead Investigator should conduct, witness, review, and/or document timely post-accident inspections/tests on infrastructure as needed to determine if pre-existing conditions contributed to the accident. Infrastructure components to be tested should include, at a minimum or as applicable, the following:

- Track structure
- Traction power system
- Signal systems
- Routing systems
- Buildings and other structures
- Bridges
- Grade crossing protection apparatus
- Other equipment or machinery

#### Event log data

Recover data from any off-vehicle event recorders such as signal system event recorders or other software driven records systems.

#### Manufacturer or system normal values

Obtain any engineering specifications, drawings, manufacturer information, or other data needed to compare infrastructure inspection/test results with intended values and performance.

#### Maintenance history

Research the prior maintenance history of infrastructure and systems to determine if any significant conditions or performance levels existed prior to the accident. Identify relevant maintenance and inspection protocols and frequency. Photocopy relevant inspection documentation, or identify maintenance and inspection activities performed and record important data such as the dates performed, results, anomalies, etc.

#### Data comparison

Compare systems performance data (inspections/tests, maintenance history) vs. prescribed engineering or manufacturer limits/specifications to determine if there may have been any contributing infrastructure/systems factors to the accident.

#### 9.3.5. Operational Conditions and Factors

#### Transit agency operating instructions

Identify all applicable transit operating instructions for the type and location of the accident.

- Operating rules, procedures, and special instructions
- Maximum authorized speed and speed restrictions
- Operating signs and locations
- Wayside signal locations and aspects capable of being displayed
- Bulletins or other special operating orders in effect at time of accident
- Automatic signal systems in effect (train control, cab signals, interlockings, automatic block, etc.)
- Any special operating conditions
- Any verbal or informal instructions in place at the time of the accident

#### Other operating instructions

Obtain and research applicable federal and state rules/regulations to determine compliance and effect on accident dynamics. As applicable, these should include, as a minimum, the following:

- Federal Railroad Administration regulations, if applicable
- Motor Vehicle Code
- Operating standards and practices
- Equipment standards
- Qualification/certification level requirements
- Inspection/maintenance standards
- Safety standards and practices

#### 9.3.6. Interviews and outside reports

#### Primary interviews

The UDOT Lead Investigator should conduct detailed face-to-face interviews as needed to determine sequence of events leading up to and at time of the accident. If possible, make an audio record of the interview and obtain interviewee signature. Interviews should include, at a minimum or as applicable:

Operators or crew members

- Other employees directly or indirectly involved in the sequence of events
- Non-employee accident principals
- Passengers
- Bystander witnesses

### Secondary interviews

Obtain any interview data conducted by other independent sources.

### Supervisory reports

Obtain applicable supervisory reports of investigation.

### Outside agency reports

Obtain applicable reports of investigation prepared by outside agencies and police.

### 9.3.7. Documenting human factors

# **Employee records**

Research employee records for performance history or incidents relating to accident dynamics. These records should include, but are not limited to, the following:

- Operating and safety practices compliance
- · Qualification/certification levels and experience
- Training and continuing education history
- Accident/Incident history
- Toxicological and medical history
- Attendance/discipline history

# Fatigue factors

Research and document employee hours of service before the accident occurred. This should include the following:

- Time employee reported for duty
- Elapsed time from on-duty time until time of accident
- Break periods before accident

- Available off-duty hours before reporting for assignment
- Number of consecutive days worked prior to day of accident
- Nature of off-duty activity prior to accident

# Fitness for duty

Research and document the employee's fitness for duty. This should include the following:

- Pre-existing medical conditions
- Results of transit agency toxicology tests

# 9.3.8. Follow-up casualty factors

# Contacting hospitals and verifying casualties

Contact hospitals to verify casualties. Obtain the following:

- Number
- Identities
- Severity (injuries vs. fatalities [if possible, obtain Medical Examiner reports])

#### Trespasser events

Conduct additional research for trespasser events. Research the following:

- Police reports related to indications of suicide or foul play
- Medical Examiner toxicological reports

# Potential injury dynamics/survival factors

Investigator should document vehicle, infrastructure, or operating conditions that could have contributed to the casualties, or increased their severity.

#### 9.3.9. Follow-up toxicological factors

### Testing results

Obtain results of post-accident toxicological testing.

### Testing determination

Obtain determination of toxicological significance, if available.

### 9.3.10. Reconstruction

As considered relevant, reconstruct the accident dynamics and sequence of events based upon all data developed from on-site investigation and off-site research. Establish facts that were contributory to the accident. Fact-finding should include, as a minimum, the following categories:

- Actual vehicle performance
- Actual infrastructure performance
- Actual employee performance
- Mathematical calculations
- Scale drawings/diagrams
- Photographic evidence

### 9.4. Analysis

When all readily obtainable information is assembled, the UDOT Lead Investigator should ensure that all existing evidence is evaluated and make a general determination as to the contributing factors and probable cause of the accident. As applicable, the following information should be included:

- All other supervisor's individual reports
- Interview reports
- Technical reports (vehicle, infrastructure, other)
- Outside agency reports
- Data contained on records, if applicable
- Hand-written statements
- Event log data
- Radio/communication tapes and/or transcripts
- Maps, drawings, or diagrams
- Photographs or videos

The UDOT Lead Investigator should keep in mind that the investigation might not have reached the final stage. Future evidence may surface which could change the determination of probable cause.

# 9.5. Preparing reports and recommendations

#### 9.5.1. Summary report

The UDOT Lead Investigator should prepare a summary report detailing the data and analysis to support a determination of the stated cause, as well as any recommended corrective actions, where needed.

# 9.5.2. Draft report

A draft report should be completed in a time period specified in the UDOT Procedures & Standards (within 30 days).

# 9.5.3. Accident/incident report

At a minimum, the accident/incident report should include the following sections:

- Executive Summary
- Sequence of events
- Prior to the accident/incident
- The accident/incident
- Subsequent to the accident/incident
- Findings/analysis
- Conclusions
- Probable cause
- Contributory causes
- Recommendations

#### 9.6. Evidence retention

In the event that UDOT has possession of any evidence or materials that belong to the transit agency, UDOT will handle such evidence in accordance with transit agency policy or request. Any UDOT photographs, reports, measurements, sketches, etc., shall be retained with the accident investigation file for not less than seven years.

#### 9.7. Corrective action plans

The UDOT Lead Investigator and the UDOT State Safety Oversight Program Manager will ensure that the transit agency develops, implements, and tracks appropriate corrective actions in accordance with Section 11 of the UDOT Procedures & Standards.

# 10. Hazard and Risk Management Program

## 10.1. Guidelines for Fulfillment of Hazard Management Program Requirements

Each rail transit agency must have a Hazard Management Program that actively analyzes the agency's operating environment, policies and procedures, system modifications and extensions, and other areas that affect safety, for potential hazards. The hazard management process must identify, report, classify, resolve, and track safety hazards in a manner that is planned, consistent, and rigorous, as well as appropriate to the transit agency's size and operating situation.

The UDOT Procedures and Standards contain the following requirements, taken from the FTA's SSO Final Rule (this is repeated from the SSPP section):

**Requirement (repeated from above):** A description of the process used by the rail transit agency to implement its hazard management program, including activities for:

- (1) Hazard identification;
- (2) Hazard investigation, evaluation and analysis;
- (3) Hazard control and elimination;
- (4) Hazard tracking; and
- (5) Requirements for on-going reporting to the oversight agency relating to hazard management activities and status.

[Reference: 49 CFR 659.19 (f)]

The information in this section is provided as guidance in the development and operation of a hazard management program. The rail transit agency shall submit its hazard management plan, or section of its SSPP, in accordance with the UDOT's SSO Program Procedures and Standards. The hazard management plan must include a threshold for reporting of the most serious classes of hazards to UDOT, as further detailed in Section 10.6. It must also include a protocol for regular review of all levels of hazards on a regular (e.g., monthly or quarterly) basis.

#### 10.2. Hazard Identification

In the hazard identification section of the program, the transit system should describe the processes used to identify and record hazards. This section should describe any hazard identification programs associated with capital projects, mechanisms for soliciting hazard reports and input from employees, any committees where the scope includes safety issues, etc. Hazard identification can be formal or informal, and the transit agency should describe all methodologies used. These may range from structured hazard analysis programs to simple field observation. The transit system's hazard management program should have continuous hazard identification as its core.

#### 10.3. Hazard Investigation, Evaluation, and Analysis

Investigation and evaluation procedures, including those associated with the safety department and any committees that may have safety responsibility, should be detailed in this section. These two steps frequently involve both investigations of severity and frequency as well as detailed discussion between transit system personnel to assess the impact of a hazard.

The analysis component of this section should detail the methodology used to categorize and prioritize identified hazards. In this section, the transit system should define a primary quantitative-qualitative methodology for hazard analysis, such as Military Standard 882. [Military Standard 882 has been a popular method for hazard analysis in the transit agency. Other methods may be used, so long as the transit system can demonstrate that appropriate personnel are familiar with the method and can apply it appropriately and consistently.] This methodology, as well as any other internal transit system procedures, should be used to establish the severity and probability of occurrence for each hazard.

Investigation, evaluation, and analysis will often require input from multiple transit agency personnel or groups. For more complicated hazards, more extensive analysis can be helpful in identifying and evaluating possible hazard scenarios.

#### 10.4. Hazard Control and Elimination

Overall, the control and elimination section should identify transit agency priorities for hazard mitigation and elimination. The transit system may place an emphasis on certain classifications of high-frequency, high-severity hazards. It may also place an emphasis on more permanent control and elimination measures such as design or equipment changes, versus procedure or training changes.

The control and elimination section should describe the process for hazard mitigation and elimination. The transit agency should describe a consistent methodology for minimizing hazards within its resources. This process should be grounded in an ongoing, consistent process and appropriate levels of intra-agency review. Hazard control and elimination may require separate discussions and descriptions relative to large projects and system modifications versus ongoing operations and maintenance.

Hazard analyses may result in Corrective Action Plans that achieve the control and elimination of hazards. UTA must formulate, report upon, and resolve Corrective Action Plans in accordance with all requirements in Section 11.

### 10.5. Hazard Tracking

The transit agency must establish an appropriate means for tracking all hazards in a log that will be reviewed regularly by UDOT. The transit agency must either submit its hazard log(s) on a monthly basis or make its log available on UTA's server to the SSO Program Manager. UTA's hazard logs shall show, at a minimum, all open/current hazards and all hazards that were open within the last 120 days. UDOT will review hazard logs independently, and will review select hazard items with the transit agency during quarterly coordination meetings. Hazard tracking logs must contain, at a minimum, the following information:

- Hazard description
- Immediate mitigation (if needed)

- Origin of hazard (e.g., accident investigation, capital project hazard analysis, employee safety committee, etc.)
- 1. Date hazard was identified
- Hazard analysis results (frequency and severity, hazard score, etc., depending on analysis method)
- Proposed permanent hazard resolution
- Hazard resolution verification/follow-up activities
- Date hazard closed
- Responsible investigator or committee leader
- Etc.

Hazard logs may be kept in separate files for separate projects, operations/maintenance, etc. It is important, however, that all hazard logs, including open and closed items, be accessible (within a reasonable amount of time) for review by UDOT personnel upon request.

From time to time, UDOT may also request a complete hazard log for a particular topic or project, or a complete history of all hazards within a range of dates. If such a log is not immediately accessible via UTA's file server, UDOT will allow a reasonable amount of time for the transit agency to fulfill such requests, typically not less than five business days.

Once the requirements of MAP-21 are fully implemented by UDOT, UTA will be required to collect a higher volume and greater scope of safety data related to transit operations and maintenance activities. This data will be gathered from many of the same departments it is obtained from currently; however, the depth of information and the frequency with which data is collected will increase. Safety Department staff at UTA will play a larger role in data gathering and analysis, as well as coordinating this process internally with UTA departments.

UDOT will work with UTA to analyze this increased volume of safety data across the system, in particular highlighting areas of concern that may become hazards or are trending towards unsafe conditions. UTA will also be required to create a process for securely storing this data, as well as processes for regularly assessing trends and communicating with UTA departments regarding any issues or concerns resulting from this analysis.

# 10.6. Requirements for Ongoing Reporting

The transit agency shall notify UDOT of all hazardous conditions that affect the immediate safety or security of the rail system. At a minimum, the transit agency shall notify UDOT within one business day, according to the notification procedures in Section 8.2, of hazardous conditions that meet the following criteria set forth in the transit agency's Hazard Assessment/Resolution Matrix:

UTA Risk		SEVERITY				
Assessment Matrix		1.	2. Critical	3. Marginal	4. Negligible	
		Catastrophic				
ľ	A. Frequent	High	High	Serious	Medium	
PROBABILI TY	B. Probable	High	High	Serious	Medium	
	C. Occasional	High	Serious	Medium	Low	
	D. Remote	Serious	Medium	Medium	Low	
	E. Improbable	Medium	Medium	Medium	Low	
	F. Eliminated	Eliminated				

UTA Risk	SEVERITY							
Assessment Matrix	1.	2	. Critical	3. Marginal	4. Negligible			
	Catastrophic							
Resolution Requirements								
High *	Unacceptable		correction required					
Serious	Undesirable		correction	may be require	d, decision by			
			management	t				
Medium	Acceptable	w/	with review a	and documentation	by management			
	review							
Low	Acceptable		without revie	ew				
Eliminated	Acceptable		no action nee	eded				

UDOT is not responsible for assigning severity/probability ratings to hazardous conditions. Therefore, to ensure that the transit agency appropriately notifies UDOT of all hazardous conditions affecting rail safety or security that are not necessarily assigned the severity/probability ratings meeting the above criteria, the transit agency shall include in its hazard log and hazard management process all hazardous conditions, incidents, occurrences, and discoveries that meet the criteria listed below:

- Incidents involving individuals working in the transit agency-controlled right of way that are investigated by the transit agency.
- Malfunctions of safety-critical systems that could result, or have resulted in catastrophic or single-point failure.
- Broken or missing safety-critical equipment, infrastructure, or systems that could result, or have resulted, in employee or passenger injury, or damage to UTA property.
- Discoveries of systemic or patterns of employee non-compliance with transit agency rules and procedures.
- Rail transit vehicle collisions with fixed objects on the mainline or in the yards.
- Rail transit vehicle derailments in the vards.
- Face-up or near miss of rail vehicles.
- Grade crossing warning system activation failure.
- Speed restriction or track closure due to track or facility damage.
- Fire or smoke on the track, on a vehicle, or in a facility.
- Broken or loose wheel or axle.
- Fallen or dragging rail vehicle equipment
- Split switch without derailment
- Train uncoupling in revenue service.
- Signal violation or overrun.
- Unauthorized train encroachment or overrun into work zone.
- Vehicle door openings on the wrong side, off station platforms, or during train movement.
- Incapacitated operator in revenue service.
- Exposed energized electrical conductors or equipment that can be contacted by passengers or employees.
- Employee or patron electric shock.

UTA should use its judgment in determining when it should notify UDOT of incidents listed above within one business day, rather than in the next hazard log submission, in the most serious, high-profile, or urgent of cases that would ordinarily reach one of the top six levels of hazardous conditions in UTA's Hazard Identification/Resolution Matrix. All of the listed types of hazards must be included in UTA's hazard log, described in Section 10.5, Hazard Tracking.

UTA must ensure that it has effective processes to identify and record hazards in the categories listed above, including hazard trending/analysis and employee reporting of hazards. UTA should assess the implementation of this identification in an ongoing manner and during internal safety audits; UDOT will informally assess this identification as well as effective mitigation measures in its ongoing review of hazard logs and formally during triennial safety and security audits.

### 10.7. Review of Safety Data and Agreement on Safety Performance

In addition to regular reviews of UTA safety data, under MAP-21, UDOT and UTA will work together and with other UTA operational staff to create safety performance goals for specific indicators, such as training and certification qualifications, worker's compensation claims, recurring maintenance issues, and other system information. These goals will be established upon FTA promulgation of categories for data collection under MAP-21, as well as actions to be taken by UDOT in the case that UTA safety performance is not meeting established goals. UDOT will be required to review and approve UTA's proposals for key performance indicators. UTA will share data at least on a quarterly basis with UDOT regarding key performance indicators and other safety critical information.

#### 10.8. Identification of Data and Hazard Trends

Under MAP-21, UDOT and UTA must work together to assess areas whose safety data indicates a developing hazard or conditions that may result in unsafe practices. UTA staff must continuously monitor the data collected from UTA departments to gain a picture of what areas might present issues. At least quarterly, UDOT will meet with UTA Safety Department staff to review and analyze safety data collected over the previous months to determine if any areas of concern are present. If UTA and UDOT staff determine a particular trend merits further action, UTA must coordinate communication with the relevant UTA department(s) to conduct an investigation and assign corrective action when appropriate. Alternately, UDOT may conduct an investigation of the potential hazard trend.

# 11. Corrective Actions

Corrective Action Plans (CAPs) are to address hazards or deficiencies identified as a result of an accident, incident, hazard investigation, the hazard management process, internal and external safety and security audits performed by UTA, UDOT, or another public agency such as FTA, FRA, TSA, or OSHA.

# 11.1. Corrective Action Plan Sources

Deficiencies are identified internally by transit agency personnel and/or external agencies, particularly UDOT State Safety Oversight. UTA is then required to develop a CAP for each of these deficiencies. The time frame for the development of a corrective action plan depends on the deficiency identified:

### 1. UDOT or FTA On-Site Safety and Security Audit.

UTA must develop CAPs for findings of non-compliance identified during a UDOT or FTA audit. Upon receipt of the final audit report, UTA will have 30 calendar days to develop a corrective action plan to correct identified deficiencies.

# 2. Accident Investigations.

Regardless of which agency conducts the accident investigation process (the transit agency or UDOT), the final report must contain findings and recommendations for addressing deficiencies or unsafe conditions identified during the process. The resolution of these deficiencies will be the primary responsibility of the transit agency, with assistance provided by UDOT, as may be required. The final report must include CAPs to correct identified deficiencies.

#### 3. Hazards.

Regardless of which agency conducts the hazard investigation process (the transit agency, UDOT, or its authorized contractor directly), the hazard investigation must result in CAPs for addressing deficiencies. This includes complaints, from personnel or the public, all of which must be tracked until the investigation is complete. The resolution of these deficiencies will be the primary responsibility of the transit agency, with assistance provided by UDOT, as may be required. Upon identification of a hazard, the transit agency will have 30 calendar days to develop a CAP to correct identified deficiencies.

#### 4. Transit Agency Internal Safety and Security Audits.

UTA must develop CAPs to address all findings from internal audits and assessments within 30 days after publication of the audit report. Additionally, If UDOT rejects UTA's annual internal safety and security audit report, the transit agency will have 30 calendar days to develop a CAP to correct identified deficiencies.

#### 5. Major Capital Projects.

Preliminary Hazard Analyses, Threat and Vulnerability Assessments, and other studies that UTA must conduct of its major capital projects may identify room for improvement. Such deficiencies must be addressed through development of a formal CAP within 30 days after completion of the study.

### 6. Data / Trend Analysis.

UTA must conduct analysis of operational and maintenance data as well as repeated occurrences of hazards and incidents to determine the existence of trends (see Section 10.8). If UTA discovers a new trend or other problem, UTA may decide to develop a CAP within 30 days. Alternatively, correction action may already be addressed by UTA's ongoing efforts to track and mitigate trends, such as its list of grade crossings involved in the most accidents.

# 7. NTSB Investigations

In case of an NTSB accident investigation, the transit agency and UDOT will examine the NTSB written accident report recommendations to determine if corrective action plans are required. NTSB recommendations will be examined by the entity to which they are addressed (the transit agency, the state safety oversight agency, the state, etc.). For each NTSB recommendation, the addressee will perform the following actions:

- Confirm, or clarify if necessary, the problem identified in (or associated with) the NTSB recommendation;
- Assess the NTSB corrective action for effectiveness in addressing the identified problem, using an appropriate hazard analysis method;
- Assess the NTSB corrective action safety benefit (or other benefit) and compare it with any similar (transit agency or UDOT) corrective actions. Identify alternative corrective actions if appropriate;
- Determine, based on hazard analysis and these steps, if the addressee (the transit agency or UDOT) will adopt the NTSB corrective action and/or additional original corrective actions;
- Develop appropriate corrective action plans as needed, and in accordance with the review and approval process in this section; and
- Establish a written record of the analyses conducted under this procedure. For the transit agency, submit this analysis and written record to the UDOT within 30 days of NTSB report receipt.

#### 8. Other.

In the course of performing or reviewing on-site safety and security audits, investigations, annual safety audits, or any other means by which UDOT becomes aware of a hazard that requires immediate attention, UDOT will notify the transit agency in writing of the identified hazard and direct the transit agency to prepare a corrective action plan. The timeframe for the corrective action plan will be specified in the written notification from UDOT.

### 11.2. Corrective Action Plan Dispute Resolution

If UTA disagrees with a UDOT Finding of Compliance with Recommendation, declines to adopt an NTSB or other agency recommendation, or decides not to implement an existing CAP, UDOT may require UTA to perform a detailed hazard analysis. The hazard analysis is meant to ensure that the deficiency, if unmitigated, does not present an unnecessary safety or security risk to rail transit passengers, patrons, and personnel, or the public. The hazard analysis must follow all requirements outlined in Section 10 of the UDOT Program Procedures and Standards as well as the transit agency's Hazard Management chapter of its SSPP.

UDOT will review the hazard analysis and decide whether to approve it or require revisions.

Revisions may be necessary if the analysis does not address the intent of the identified Finding of Compliance with Recommendation or does not follow hazard analysis process requirements. If the hazard analysis shows that the deficiency presents an unacceptable level of risk when left unmitigated, UDOT will reject the hazard analysis and require the transit agency to propose a CAP.

For all Findings of Non-Compliance identified during UDOT audits, UTA must develop a CAP under all circumstances. UDOT will work with UTA to ensure agreement regarding the facts of a given Finding of Non-Compliance.

# 11.3. Corrective Action Plan Components

UDOT recommends that UTA evaluate each proposed CAP through an interdepartmental committee to ensure that all parties are satisfied with the planned action and that it does not introduce unforeseen hazards into the system.

Each CAP must include the following information:

- a. Identify noted deficiency/finding/hazard
- b. Date corrective action plan was opened
- c. Process, plan, or mechanism to address and resolve deficiency
- d. Time-frame for implementation of each part of the plan
- e. Department(s) and person(s) who will be responsible for implementation
- f. Cost of resolving deficiency, if known and applicable
- g. Source of the CAP
- h. CAP tracking ID
- i. Line for SSO Program Manager approval and date of approval
- j. Proposed implementation date
- k. Actual implementation date (once approved and completed)
- l. Issues preventing resolution
- m. SSO verification that CAP was implemented
- n. Other critical information, as appropriate

# 11.4. Corrective Action Plan Initial Approval

UTA must submit each new, proposed CAP to UDOT within the timeframes specified in Section 11.1. For all of the following sources of CAPs, UDOT must review the proposed CAP to decide whether it will fully and appropriately address the deficiency:

- UDOT audits, reviews, and findings
- Hazards whose severity/probability UTA has identified as unacceptable
- Accident/incident investigations

In these cases, when UDOT approves the CAP, the UDOT SSO Program Manager will sign the CAP sheet for initial approval before implementation. For all other types of CAPs, UDOT initial approval is not necessary; the CAP may automatically be added to tracking logs for implementation.

If UDOT rejects the proposed CAP, the transit agency will have 15 calendar days to address noted deficiencies in the plan and submit a revised plan to UDOT. UDOT, at its discretion, may arrange for a meeting with the transit agency to discuss the noted deficiencies.

One reason for CAP rejection may be an extended timeframe for implementation without any short-term mitigation. For CAPs that require long-term implementation, UTA should identify interim measures to address the deficiency until permanent measures can be completed.

Similarly, UTA must also ensure that budget constraints do not prevent CAPs from mitigating deficiencies. Such constraints may necessitate UTA to make the expensive CAP a long-term effort, while inexpensive remedial actions occur in the meantime. Alternately, a mix of several, creative, inexpensive mitigations may be needed in place of a CAP calling for prohibitively costly improvements.

### 11.5. Corrective Action Plan Monitoring and Reporting

UTA shall maintain a CAP log that contain all information listed in Section 11.2 for CAPs resulting from all types of sources listed in Section 11.1

UTA must submit the CAP log to UDOT monthly. The log shall be current with CAP resolution information included and formatted to show, at a minimum, all open CAPs and all CAPs that were closed within the last 120 calendar days. Electronic corrective action plan log submissions are preferred; the transit agency may send the document to UDOT via electronic mail at an address agreed to by the UDOT SSO Program Manager. UDOT will review select CAP items with the transit agency during regular quarterly coordination meetings.

### 11.6. Corrective Action Plan Verification and Final Approval

Regular quarterly coordination meetings between UDOT and UTA will involve discussion of all CAPs that UTA has fully implemented since the last coordination meeting. For all CAPs, regardless of whether initial approval was required, UDOT must conduct review and verification that each CAP has been adequately addressed before it may be closed. UDOT will conduct this verification through one or more of the following means:

- Field observation
- Photographs provided by the transit agency
- Receipt of new or revised document
- Work order or similar document showing full completion
- Audit of transit agency records

UDOT may request specific documents to verify CAP implementation and completion on a case-by-case basis. After UDOT has verified CAP completion, the SSO Program Manager will sign off on its completion before it can be considered closed.

Frocedures & Standards							
If UDOT disagrees with UTA's completion of a CAP, UDOT may require UTA to perform a mor detailed hazard analysis to ensure that the CAP resolution is appropriate. If the transit agency and UDOT cannot agree on the satisfactory completion of a CAP, the two parties will wor together to perform an exhaustive hazard analysis to prove or disprove the existence of the issue							

# 12. Other UDOT Reviews

## 12.1. Reviews of Safety and Security Certification Program

The transit agency is required to have a Safety and Security Certification (SSC) program to help ensure that safety and security concerns, hazards, threats, and vulnerabilities are adequately addressed prior to the initiation of passenger operations for New Starts and subsequent major projects to extend, rehabilitate, or modify an existing system, or to replace vehicles and equipment. Though UDOT is not a signatory to the SSC program, UDOT shall provide general review and oversight of the SSC process. The transit agency shall submit SSC plans and documents to UDOT for review and comment on all projects subject to the SSC process. UDOT will participate, as appropriate, in SSC-related meetings, document reviews, on-site activities, and may issue specific findings, guidance, or directives to the transit agency in order to address safety and security issues related to certifiable elements and certifiable items and potential workarounds. UDOT will be involved in such activities in the engineering/design and construction phases, with more attention to the project as it nears completion.

# 12.2. Reviews of System Expansions and System Modifications

In order to assess safety and security of new projects, and to verify safety and security processes within the transit system, UDOT may review or audit any major guideway system modifications and system expansions, and any projects that have a significant safety or security impact. The following lists types and examples of fixed guideway system expansions or modifications eligible for UDOT review or audit:

- New starts or system expansions
- Major reconstruction of existing lines
- Major redesign and installation of system components
- New or significantly reconstructed maintenance and operating facilities
- New vehicle procurements or mid-life overhauls
- Other projects deemed to have significant safety implications, including projects implemented by others that have a direct impact on the operations of the covered transit agency.

The review and oversight by UDOT will depend significantly on the type of system expansion or modification under review. UDOT may review any and all development phases of applicable projects including:

- Project Planning
- Preliminary Engineering
- Final Design
- Procurement
- Construction
- Operations and Maintenance Procedures and Plans
- Training
- Testing
- Start-Up

The UDOT review may include each of these phases, so that any safety/security-critical issues can be resolved as early as possible, to avoid or minimize the need for retroactive modifications and retrofits. This approach should allow the covered systems to resolve safety issues in a timely manner, so as not to delay the project implementation schedule.

In reviewing each phase of a major system expansion or modification, UDOT will focus its resources on providing an independent review of safety-critical system elements and activities, in addition to the more general aspects of a project that could affect the safety of existing operations. The materials UDOT may review throughout the project may include the following:

- Planning Studies (that evaluates alternatives and defines a project's scope)
- Design Criteria and Standards Manual
- Design Documents
- Safety Certification Plan
- Project Management Plans (required on major FTA-funded projects)
- Configuration Management Plans
- Construction Plan and Schedules
- Operating Changes and Plans during Project Construction
- Transportation & Maintenance Operating Procedures
- Training Programs and Procedures
- Integrated Test Program
- Emergency Procedures
- System Safety Audits and Reviews
- Security Plans

After the review of a particular project phase has been completed, UDOT may issue written findings and recommendations, as appropriate. UDOT will continue to review each phase of the project until project completion. At project completion, the system expansion and modification will be incorporated into UDOT's triennial audit of the operating and maintenance activities of the transit agency.

### 12.3. Pre-Revenue Service Assessments

Upon the transition of a rail system expansion project from the testing phase to the pre-revenue operations phase, UDOT will conduct a Pre-Revenue Service Assessment. This will typically coincide with or occur after Hold Point #2 of UTA's Rail Activation process. UDOT's review is intended to ensure that the SSC process has been completed, or that there are appropriate workarounds in place for any unfinished certifiable elements and items that do not necessarily preclude the safe operation of the rail system. UDOT will also review operational and maintenance readiness, as well as the completeness of training programs and modifications to transit agency plans, policies, and procedures. UDOT will issue a written report to the transit agency documenting any unfinished items and potential hazards, and any findings or recommendations requiring a corrective action plan. The review process and timeframe will follow the steps outlined in Section 7.2, but may be expedited based on the project timeline.

### 12.4. Reviews of Threat and Vulnerability Assessments

UTA must provide results of Threat and Vulnerability Assessments (TVAs) according to the process described in Section 6, Internal Safety and Security Audits. Assessment reports must be

provided to UDOT within 30 days of completion, though an additional annual submission is not necessary. For each finding from a TVA, the transit agency must develop a formal Corrective Action Plan as described in this document in Section 11. UTA may include these findings in its overall Corrective Action Plan process or may create a separate log for security-related findings. UDOT will review and approve security-related Corrective Action Plans according to the requirements in Section 11.

The State of Utah, UDOT, and the SSO program will prevent the TVA and Sensitive Security Information (SSI) documents from being disclosed to the public by controlling access to electronic and paper copies of the plan at both UDOT and the SSO program project office. UDOT and/or its contractor may review security-related documents remotely or on-site at UTA and, if required by UTA, will accept password-protected, electronic documents. In addition to SSI-classified documents, UDOT reviews and will keep secret any information contained within internal security audits, threat and vulnerability assessments, and Security and Emergency Preparedness Plans unless UTA issues its consent. Regardless of the sensitivity of information, UTA still must follow all reporting and approval requirements and procedures for security-related information as it does for safety-related information.

# 13. Standard for Rail Transit Agency System Safety Program Plan and Security and Emergency Preparedness Plan(s)

### 13.1. System Safety Program Plan (SSPP)

The system safety plan shall include, at a minimum:

- (a) A policy statement signed by the agency's chief executive that endorses the safety program and describes the authority that establishes the SSPP.
- (b) A clear definition of the goals and objectives for the safety program and stated management responsibilities to ensure they are achieved.
- (c) An overview of the management structure of the rail transit agency, including:
  - (1) An organization chart;
  - (2) A description of how the safety function is integrated into the rest of the rail transit organization; and
  - (3) Clear identification of the lines of authority used by the rail transit agency to manage safety issues.
- (d) The process used to control changes to the SSPP, including:
  - (1) Specifying an annual assessment of whether the SSPP should be updated; and
  - (2) Required coordination with the oversight agency, including timeframes for submission, revision, and approval.
- (e) A description of the specific activities required to implement the system safety program, including:
  - (1) Tasks to be performed by the rail transit safety function, by position and management accountability, specified in matrices and/or narrative format; and
  - (2) Safety-related tasks to be performed by other rail transit departments, by position and management accountability, specified in matrices and/or narrative format.
- (f) A description of the process used by the rail transit agency to implement its hazard management program, including activities for:
  - (1) Hazard identification;
  - (2) Hazard investigation, evaluation and analysis;
  - (3) Hazard control and elimination;
  - (4) Hazard tracking; and
  - (5) Requirements for on-going reporting to the oversight agency relating to hazard management activities and status.
- (g) A description of the process used by the rail transit agency to ensure that safety concerns are addressed in modifications to existing systems, vehicles, and equipment, which do not require formal safety certification but which may have safety impacts.
- (h) A description of the safety certification process required by the rail transit agency to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations for New Starts and subsequent major projects to extend, rehabilitate, or modify an existing system, or to replace vehicles and equipment.

- (i) A description of the process used to collect, maintain, analyze, and distribute safety data, to ensure that the safety function within the rail transit organization receives the necessary information to support implementation of the system safety program.
- (j) A description of the process used by the rail transit agency to perform accident notification, investigation and reporting, including:
  - (1) Notification thresholds for internal and external organizations;
  - (2) Accident investigation process and references to procedures;
  - (3) The process used to develop, implement, and track corrective actions that address investigation findings;
  - (4) Reporting to internal and external organizations; and
  - (5) Coordination with the oversight agency.
- (k) A description of the process used by the rail transit agency to develop an approved, coordinated schedule for all emergency management program activities, which include:
  - (1) Meetings with external agencies;
  - (2) Emergency planning responsibilities and requirements;
  - (3) Process used to evaluate emergency preparedness, such as annual emergency field exercises;
  - (4) After action reports and implementation of findings;
  - (5) Revision and distribution of emergency response procedures;
  - (6) Familiarization training for public safety organizations; and
  - (7) Employee training.
- (l) A description of the process used by the rail transit agency to ensure that planned and scheduled internal safety reviews are performed to evaluate compliance with the SSPP, including:
  - (1) Identification of departments and functions subject to review;
  - (2) Responsibility for scheduling reviews;
  - (3) Process for conducting reviews, including the development of checklists and procedures and the issuing of findings;
  - (4) Review of reporting requirements;
  - (5) Tracking the status of implemented recommendations; and
  - (6) Coordination with the oversight agency.
- (m) A description of the process used by the rail transit agency to develop, maintain, and ensure compliance with rules and procedures having a safety impact, including:
  - (1) Identification of operating and maintenance rules and procedures subject to review;
  - (2) Techniques used to assess the implementation of operating and maintenance rules and procedures by employees, such as performance testing;
  - (3) Techniques used to assess the effectiveness of supervision relating to the implementation of operating and maintenance rules; and
  - (4) Process for documenting results and incorporating them into the hazard management program.
- (n) A description of the process used for facilities and equipment safety inspections, including:
  - (1) Identification of the facilities and equipment subject to regular safety related inspection and testing:
  - (2) Techniques used to conduct inspections and testing:
  - (3) Inspection schedules and procedures; and
  - (4) Description of how results are entered into the hazard management process.

- (o) A description of the maintenance audits and inspections program, including identification of the affected facilities and equipment, maintenance cycles, documentation required, and the process for integrating identified problems into the hazard management process.
- (p) A description of the training and certification program for employees and contractors, including:
  - (1) Categories of safety-related work requiring training and certification;
  - (2) A description of the training and certification program for employees and contractors in safety-related positions;
  - (3) Process used to maintain and access employee and contractor training records; and
  - (4) Process used to assess compliance with training and certification requirements.
- (q) A description of the configuration management control process, including:
  - (1) The authority to make configuration changes;
  - (2) Process for making changes; and
  - (3) Assurances necessary for formally notifying all involved departments.
- (r) A description of the safety program for employees and contractors that incorporates the applicable local, state, and federal requirements, including:
  - (1) Safety requirements that employees and contractors must follow when working on, or in close proximity to, rail transit agency property; and
  - (2) Processes for ensuring the employees and contractors know and follow the requirements.
- (s) A description of the hazardous materials program, including the process used to ensure knowledge of and compliance with program requirements.
- (t) A description of the drug and alcohol program and the process used to ensure knowledge of and compliance with program requirements.
- (u) A description of the measures, controls, and assurances in place to ensure that safety principles, requirements and representatives are included in the rail transit agency's procurement process.

### Please refer to the SSPP checklist in Appendix D.

#### 13.2. Security and Emergency Preparedness Plan(s)

UDOT has adopted the "Security and Emergency Preparedness Plan," or SEPP, format defined by FTA guidelines, in place of the "System Security Plan" described in 49 CFR Part 659.23. The SEPP format is consistent with requirements of other federal agencies, including the Department of Homeland Security, and covers all of the requirements set forth in the FTA Final Rule. As such, UDOT requires the development and implementation of the SEPP elements listed below to ensure that the covered transit agencies fulfill both state and federal security and emergency preparedness requirements and best practices.

The organizational structure of the transit agency may result in the development of separate Security and Emergency Preparedness Plans. Such an approach is acceptable to UDOT as long as the plans, in the aggregate, fulfill the requirements listed below.

The Security and Emergency Preparedness Plan(s) shall include, at a minimum, the following:

- (1) Memorandum of Executive Approval/System Security Policy
  - (a) System Security Program Introduction
  - (b) Purpose of the SEPP
  - (c) System Security
  - (d) Emergency Preparedness
  - (e) Goals and Objectives
  - (f) Goals
  - (g) Objectives
  - (h) Scope of Program
  - (i) Security and Law Enforcement
  - (j) Management Authority and Legal Aspects
  - (k) Government Involvement
  - (l) Security Acronyms and Definitions
- (2) System Description
  - (a) Background & History of System
  - (b) Organizational Structure
  - (c) Human Resources
  - (d) Passengers
  - (e) Services and Operations
  - (f) Operating Environment
  - (g) Integration with Other Plans and Programs
  - (h) Current Security Conditions
  - (i) Capabilities and Practices
- (3) SEPP Management Activities
  - (a) Responsibility for Mission Statement and System Security Policy
  - (b) Management of the SEPP Program
  - (c) Division of Security Responsibilities
    - Security/Police Function Responsibilities
    - o Security Responsibilities of Other Departments/Functions
    - o Job-specific Security Responsibilities
    - Security Task Responsibilities Matrix
    - o Security Committees
- (4) SEPP Program Description
  - (a) Planning
  - (b) Organization
  - (c) Equipment
  - (d) Training and Procedures
  - (e) Emergency Exercises and Evaluation

- (5) Threat and Vulnerability Identification, Assessment, and Resolution
  - (a) Threat and Vulnerability Identification
    - o 5.1.1 Asset Analysis
    - 5.1.2 Security Data Collection for the Identification of Threats and Vulnerabilities
    - 5.1.3 Other Sources of Information Security Reviews, Testing and Inspection Programs
    - o 5.1.4 Identifying Threats for Prioritized Assets
    - o 5.1.5 Identifying Vulnerabilities
  - (b) Threat and Vulnerability Assessment
  - (c) Threat and Vulnerability Resolution
- (6) Implementation and Evaluation of SEPP
  - (a) Implementation Tasks for Goals and Objectives
  - (b) Implementation Schedule
  - (c) Evaluation
- (7) Modification of SEPP
  - (a) Initiation
  - (b) Review Process
  - (c) Implement Modifications

# Please refer to the SEPP checklist in Appendix D.

### 13.3. UDOT Review of the SSPP and SEPPs

UDOT requires the transit agency to conduct an annual review of its SSPP and SEPPs. On or before Jan 1<sup>st</sup> of each year, the transit agency must provide UDOT with the annual update of its SSPP and SEPP, including the rail transit agency CEO's signature, with a table of revisions, identifying and explaining any and all changes to the plans for review and approval.

The transit agency must also submit to UDOT any SSPP or SEPP revisions made between annual updates. Such submissions should be made a minimum of 30 days prior to the time the revision is to be implemented by the transit agency. UDOT will review, and approve as appropriate, such revisions in a manner similar to the annual review described in this section.

UDOT may request modifications to the UTA's SSPP due to audit report results, on-site reviews and investigations, changing trends in accident/incident or security data, or other reasons that may come to the attention of UDOT. Upon receipt of a written request for SSPP modifications from UDOT, the transit agency shall submit a revised SSPP within 30 calendar days.

Within 30 calendar days of receipt of the plans, UDOT will issue a formal written response either approving or rejecting the safety or security plans, along with checklists used to review the plan. If UDOT rejects either plan, the transit agency will have 30 calendar days to address noted deficiencies and requested changes in the plans and submit a revised plan(s) to UDOT, unless otherwise specified by UDOT. UDOT, at its discretion, may arrange for a meeting with the transit agency to discuss the noted deficiencies and requested changes.

In the event the transit system objects to a noted deficiency or requested change from UDOT it shall formally state its objections in writing and suggest alternatives within 5 calendar days. UDOT and the transit agency shall review the objections and suggested alternatives and agree to

an appropriate course of action within 30 calendar days. The revised and updated plan(s) shall be submitted to UDOT for review and approval within 15 calendar days after agreement on a course of action.

Plans may be delivered to UDOT in a format agreed to by the UDOT Program Manager (electronic or hard copy). Once a plan has been approved by UDOT, the transit agency must submit a copy to UDOT in an unalterable format (electronic or hard copy) with all required approval signatures visible. Following the receipt and approval of the plans, UDOT will submit a formal written letter, along with checklists used to review the plans to the FTA.

The State of Utah, UDOT, and the SSO program will prevent the SEPPs and other and Sensitive SSI documents from being disclosed to the public by controlling access to electronic and paper copies of the plan at both UDOT and the SSO program project office. UDOT and/or its contractor may review security-related documents remotely or on-site at UTA and, if required by UTA, will accept password-protected, electronic documents. In addition to SSI-classified documents, UDOT reviews and will keep secret any information contained within internal security audits, threat and vulnerability assessments, and Security and Emergency Preparedness Plans unless UTA issues its consent. Regardless of the sensitivity of information, UTA still must follow all reporting and approval requirements and procedures for security-related information as it does for safety-related information.

# **Appendix A: Selected State Legislation**

# 54-4-14. Safety regulation.

The commission shall have power, by general or special orders, rules or regulations, or otherwise, to require every public utility to construct, maintain and operate its line, plant, system, equipment, apparatus, tracks and premises in such manner as to promote and safeguard the health and safety of its employees, passengers, customers and the public, and to this end to prescribe, among other things, the installation, use, maintenance and operation of appropriate safety or other devices or appliances including interlocking and other protective devices at grade crossings or junctions, and block or other system of signaling, and to establish uniform or other standards of construction and equipment, and to require the performance of any other acts which the health or safety of its employees, passengers, customers or the public may demand, provided, however, that the department of transportation shall have jurisdiction over those safety functions transferred to it by the Department of Transportation Act.

#### **Public Transit District Act**

# 17A-2-1016. Powers of incorporated district -- Bidding -- Eminent domain.

- (1) As used in this section, "operator" means any city, public agency, person, firm, or Private Corporation engaged in the transportation of passengers for hire.
- (2) Any district incorporation under this peat may:
  - a. Have perpetual succession;
  - b. Sue and be sued in all actions and proceedings and in al corrts and tribunals of competent jurisdiction;
  - c. Adopt a corporate seal and alter it at pleasure;
  - d. Levy and collect taxes only for paying;
    - i. The principal and interest of bonded indebtedness of the district; or
    - ii. Any final judgment obtained against the district beyond the amount of any collectable insurance or indemnity policy if the district is required by final order of any court of competent jurisdiction to levy a tax to pay the judgment;
  - e. Take by grant, purchase, bequest, devise, or lease, and to hold, enjoy, lease, sell, encumber, alien, or otherwise dispose of real or personal property of every kind within the district;
  - f. Make contracts and enter into stipulations of any nature, including contracts and stipulations:
    - i. To indemnify and save harmless;
    - ii. To do all acts to exercise the powers granted in this part; and
    - iii. With any department or agency of the United states of America of the state, or with any public agency or private person, firm, or corporation upon terms and conditions the board of directors finds are in the best interests of the district;

g.

- i. Insure against;
  - A. loss of revenues from or destruction of the system or any part of the system, from any cause whatsoever; or
  - B. public liability or property damage, or against all other types of events, acts, or omissions; and

- ii. provide in the proceedings authorizing the issuance of any bonds for the carrying of any other insurance, in an amount and of such character as may be specified, and for the payment of the premiums on the insurance;
- h. provide a public transit system for the transportation of passengers and their incidental baggage;
- i. purchase all supplies, equipment and materials;
- j. construct facilities and works, but when the expenditure required exceeds \$25,000 construction shall be let by contract to the lowest responsible bidder or proposer;
- k. acquire, contract for, lease, construct, own, operate, control, or use rights-of-way, rail lines, monorails, bus lines, stations, platforms, switches, yards, terminals, parking lots, any facilities necessary or convenient for public transit service, and all structures necessary for access by person and vehicles;
- l. hire, lease, or contract for the supplying of, or management of, any facilities, operations, equipment, services, employees, or management staff of any operator and provide for subleases or subcontracts by the operator upon terms that are in the public interest; and
- m. Operate feeder bus lines and other feeder services as necessary.
- (3)
- a. Bids or proposals shall be advertised through public notice as determined by the board.
- b. The notice may include publication in a newspaper of general circulation in the district, trade journal, or other method determined by the board at least once and not less than ten days prior to the expiration of the period within which bids or proposals are received.
- c. The board may reject any and all bids or proposals and readvertise or give renotice at its discretion.
- d. If, after rejecting bids or proposals, the board determines and declares by vote of two-thirds of all its members present that in its opinion the supplies, equipment, and materials may be purchased at a lower price in the open market, the board may proceed to purchase the same in the open market without further observance of the provisions requiring contracts, bids or proposals, advertisement, or notice.
- e. Contracts, in writing or otherwise, may be let without advertising for or inviting bids when any repairs, alterations, or other work or the purchase of materials, supplies, equipment, or other property is found by the board upon a two-thirds vote of its members present to be of urgent necessity, or where the general manager certifies by affidavit that there is only one source for the required supplies, equipment, and materials, or construction items.
- f. If any payment on a contract with a private contractor to construct facilities under this section is retained or withheld, it shall be retained or withheld and released as provided in section 13-8-5

(4)

- a. Installations in state highways or freeways are subject to the approval of the Department of Transportation.
- b. It is presumed that the use of the streets, roads, highways, and other public places by the district for any of the purposes permitted in this section constitutes no greater burden on adjoining properties than the uses existing on July 9, 1969.
- c. If facilities, other than state highways or freeways referred to in Subsection (2), including streets, roads, highways, pipelines, sewers, water mains, storm drains, poles, and communications wires of another public agency of the state, or of a private owner must be relocated, replaced, or altered in order for the district to

- construct or operate its system, or to preserve and maintain already constructed district facilities, the facilities shall be relocated, replaced, or altered with reasonable promptness by the respective public corporation, state, or private owner and the district shall by prior agreement reimburse the public corporation, state, or private owner for the reasonable cost incurred in relocation, replacement or alteration
- d. The district may enter into an agreement with any city or county having jurisdiction over the street, road, or highway involved and, as may be provided by agreement, close any city street or county road at or near the point of its interception with any district facility or provide for carrying the city street or county road over or under or to a connection with the district facility and may do any and all work on the city street or county road as is necessary. A city street or county road may not be closed directly or indirectly by the construction of district facilities except;
  - i. pursuant to agreement; or (ii) while temporarily necessary during the construction of district facilities.
- (5) The state, a municipality, or a county may acquire private property interests by eminent domain pursuant to Title 78, Chapter 34, Eminent Domain, including fee simple, easements, air rights, rights-of-way, and other private property interests necessary to the establishment and operation of a public transit district.

# 17A-2-1026. Safety regulations.

The district shall be subject to regulations of the Department of Transportation relating to safety appliances and procedures, and the department shall inspect all work done pursuant to this part and may make further additions or changes necessary for the purpose of safety to employees and the general public.

Renumbered and Amended by Chapter 186, 1990 General Session

# Appendix B: FTA Rule 49 CFR Part 659

**PART 659**--RAIL FIXED GUIDEWAY SYSTEMS; STATE SAFETY OVERSIGHT Authority: 49 U.S.C. 5330.

### **Subpart A – General Provisions**

### § 659.1 Purpose.

This part implements 49 U.S.C. 5330 by requiring a state to oversee the safety and security of rail fixed guideway systems through a designated oversight agency.

### § 659.3 Scope.

This part applies only to states with rail fixed guideway systems, as defined in this part.

## § 659.5 Definitions.

Contractor means an entity that performs tasks required on behalf of the oversight or rail transit agency. The rail transit agency may not be a contractor for the oversight agency.

Corrective action plan means a plan developed by the rail transit agency that describes the actions the rail transit agency will take to minimize, control, correct, or eliminate hazards, and the schedule for implementing those actions.

FRA means the Federal Railroad Administration, an agency within the U.S. Department of Transportation.

FTA means the Federal Transit Administration, an agency within the U.S. Department of Transportation.

Hazard means any real or potential condition (as defined in the rail transit agency's hazard management process) that can cause injury, illness, or death; damage to or loss of a system, equipment or property; or damage to the environment.

Individual means a passenger; employee; contractor; other rail transit facility worker; pedestrian; trespasser; or any person on rail transit-controlled property.

Investigation means the process used to determine the causal and contributing factors of an accident or hazard, so that actions can be identified to prevent recurrence.

New Starts Project means any rail fixed guideway system funded under FTA's 49 U.S.C. 5309 discretionary construction program.

Oversight Agency means the entity, other than the rail transit agency, designated by the state or several states to implement this part.

Passenger means a person who is on board, boarding, or alighting from a rail transit vehicle for the purpose of travel.

Passenger Operations means the period of time when any aspect of rail transit agency operations are initiated with the intent to carry passengers.

Program Standard means a written document developed and adopted by the oversight agency, that describes the policies, objectives, responsibilities, and procedures used to provide rail transit agency safety and security oversight.

Rail Fixed Guideway System means any light, heavy, or rapid rail system, monorail, inclined plane, funicular, trolley, or automated guideway that:

- (1) Is not regulated by the Federal Railroad Administration; and
- (2) Is included in FTA's calculation of fixed guideway route miles or receives funding under FTA's formula program for urbanized areas (49 U.S.C. 5336); or
- (3) Has submitted documentation to FTA indicating its intent to be included in FTA's calculation of fixed guideway route miles to receive funding under FTA's formula program for urbanized areas (49 U.S.C. 5336).

Rail Transit Agency means an entity that operates a rail fixed guideway system.

Rail Transit-Controlled Property means property that is used by the rail transit agency and may be owned, leased, or maintained by the rail transit agency.

Rail Transit Vehicle means the rail transit agency's rolling stock, including but not limited to passenger and maintenance vehicles.

Safety means freedom from harm resulting from unintentional acts or circumstances.

Security means freedom from harm resulting from intentional acts or circumstances.

State means a State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands.

System Safety Program Plan means a document developed and adopted by the rail transit agency, describing its safety policies, objectives, responsibilities, and procedures.

System Security Plan means a document developed and adopted by the rail transit agency describing its security policies, objectives, responsibilities, and procedures.

### Subpart B - Role of the State

#### § 659.7 Withholding of funds for noncompliance.

- (a) The Administrator of the FTA may withhold up to five percent of the amount required to be distributed to any state or affected urbanized area in such state under FTA's formula program for urbanized areas, if:
- (1) The state in the previous fiscal year has not met the requirements of this part; and
- (2) The Administrator determines that the state is not making adequate efforts to comply with this part.
- (b) The Administrator may agree to restore withheld formula funds, if compliance is achieved within two years (See 49 U.S.C. 5330).

### § 659.9 Designation of oversight agency.

(a) General requirement. Each state with an existing or anticipated rail fixed guideway system regulated by this part shall designate an oversight agency consistent with the provisions of this section. For a rail fixed guideway system that will operate in only one state, the state must designate an agency of the state, other than the rail transit agency, as the oversight agency to implement the requirements in this part. The state's

designation or re-designation of its oversight agency and submission of required information as specified in this section, are subject to review by FTA.

- (b) Exception. States which have designated oversight agencies for purposes of this part before May 31, 2005 are not required to re-designate to FTA.
- (c) Timing. The state designation of the oversight agency shall:
- (1) Coincide with the execution of any grant agreement for a New Starts project between FTA and a rail transit agency within the state's jurisdiction; or
- (2) Occur before the application by a rail transit agency for funding under FTA's formula program for urbanized areas (49 U.S.C. 5336).
- (d) Notification to FTA. Within (60) days of designation of the oversight agency, the state must submit to FTA the following:
- (1) The name of the oversight agency designated to implement requirements in this part;
- (2) Documentation of the oversight agency's authority to provide state oversight;
- (3) Contact information for the representative identified by the designated oversight agency with responsibility for oversight activities;
- (4) A description of the organizational and financial relationship between the designated oversight agency and the rail transit agency; and
- (5) A schedule for the designated agency's development of its State Safety Oversight Program, including the projected date of its initial submission, as required in §659.39(a).
- (e) Multiple states. In cases of a rail fixed guideway system that will operate in more than one state, each affected state must designate an agency of the state, other than the rail transit agency, as the oversight agency to implement the requirements in this part. To fulfill this requirement, the affected states:
- (1) May agree to designate one agency of one state, or an agency representative of all states, to implement the requirements in this part; and
- (2) In the event multiple states share oversight responsibility for a rail fixed guideway system, the states must ensure that the rail fixed guideway system is subject to a single program standard, adopted by all affected states.
- (f) Change of designation. Should a state change its designated oversight agency, it shall submit the information required under paragraph (d) of this section to FTA within (30) days of its change. In addition, the new oversight agency must submit a new initial submission, consistent with §659.39(b), within (30) days of its designation.

### § 659.11 Confidentiality of investigation reports and security plans.

- (a) A state may withhold an investigation report that may have been prepared or adopted by the oversight agency from being admitted as evidence or used in a civil action for damages resulting from a matter mentioned in the report.
- (b) This part does not require public availability of the rail transit agency's security plan and any referenced procedures.

### Subpart C - Role of the State Oversight Agency

## § 659.13 Overview.

The state oversight agency is responsible for establishing standards for rail safety and security practices and procedures to be used by rail transit agencies within its purview. In addition, the state oversight agency must oversee the execution of these practices and procedures, to ensure compliance with the provisions of this part. This subpart identifies and describes the various requirements for the state oversight agency.

### § 659.15 System safety program standard.

- (a) General requirement. Each state oversight agency shall develop and distribute a program standard. The program standard is a compilation of processes and procedures that governs the conduct of the oversight program at the state oversight agency level, and provides guidance to the regulated rail transit properties concerning processes and procedures they must have in place to be in compliance with the state safety oversight program. The program standard and any referenced program procedures must be submitted to FTA as part of the initial submission. Subsequent revisions and updates must be submitted to FTA as part of the oversight agency's annual submission.
- (b) Contents. Each oversight agency shall develop a written program standard that meets the requirements specified in this part and includes, at a minimum, the areas identified in this section.
- (1) Program management section. This section shall include an explanation of the oversight agency's authority, policies, and roles and responsibilities for providing safety and security oversight of the rail transit agencies within its jurisdiction. This section shall provide an overview of planned activities to ensure on-going communication with each affected rail transit agency relating to safety and security information, as well as FTA reporting requirements, including initial, annual and periodic submissions.
- (2) Program standard development section. This section shall include a description of the oversight agency's process for the development, review, and adoption of the program standard, the modification and/or update of the program standard, and the process by which the program standard and any subsequent revisions are distributed to each affected rail transit agency.
- (3) Oversight of rail transit agency internal safety and security reviews. This section shall specify the role of the oversight agency in overseeing the rail transit agency internal safety and security review process. This includes a description of the process used by the oversight agency to receive rail transit agency checklists and procedures and approve the rail transit agency's annual reports on findings, which must be submitted under the signature of the rail transit agency's top management.
- (4) Oversight agency safety and security review section. This section shall lay out the process and criteria to be used at least every three years in conducting a complete review of each affected rail transit agency's implementation of its system safety program plan and system security plan. This section includes the process to be used by the affected rail transit agency and the oversight agency to manage findings and recommendations from this review. This also includes procedures for notifying the oversight agency before the rail transit agency conducts an internal review.
- (5) Accident notification section. This section shall include the specific requirements for the rail transit agency to notify the oversight agency of accidents. This section shall also include required timeframes, methods of notification, and the information to be submitted by the rail transit agency. Additional detail on this portion is included in §659.33 of this part.
- (6) Investigations section. This section contains the oversight agency identification of the thresholds for incidents that require an oversight agency investigation. The roles and responsibilities for conducting investigations shall include: coordination with the rail transit agency investigation process, the role of the

oversight agency in supporting investigations and findings conducted by the NTSB, review and concurrence of investigation report findings, and procedures for protecting the confidentiality of investigation reports.

- (7) Corrective actions section. This section shall specify oversight agency criteria for the development of corrective action plan(s) and the process for the review and approval of a corrective action plan developed by the rail transit agency. This section shall also identify the oversight agency's policies for the verification and tracking of corrective action plan implementation, and its process for managing conflicts with the rail transit agency relating to investigation findings and corrective action plan development.
- (8) System safety program plan section. This section shall specify the minimum requirements to be contained in the rail transit agency's system safety program plan. The contents of the system safety plan are discussed in more detail in §659.19 of this part. This section shall also specify information to be included in the affected rail transit agency's system safety program plan relating to the hazard management process, including requirements for on-going communication and coordination relating to the identification, categorization, resolution, and reporting of hazards to the oversight agency. More details on the hazard management process are contained in §659.31 of this part. This section shall also describe the process and timeframe through which the oversight agency must receive, review, and approve the rail transit agency system safety program plan.
- (9) System security plan section. This section shall specify the minimum requirements to be included in the rail transit agency's system security plan. More details about the system security plan are contained in §§659.21 through 659.23 of this part. This section shall also describe the process by which the oversight agency will review and approve the rail transit agency system security program plan. This section also shall identify how the state will prevent the system security plan from public disclosure.

#### § 659.17 System safety program plan: general requirements.

- (a) The oversight agency shall require the rail transit agency to develop and implement a written system safety program plan that complies with requirements in this part and the oversight agency's program standard.
- (b) The oversight agency shall review and approve the rail transit agency system safety program plan.
- (c) After approval, the oversight agency shall issue a formal letter of approval to the rail transit agency, including the checklist used to conduct the review.

#### § 659.19 System safety program plan: contents.

The system safety plan shall include, at a minimum:

- (a) A policy statement signed by the agency's chief executive that endorses the safety program and describes the authority that establishes the system safety program plan.
- (b) A clear definition of the goals and objectives for the safety program and stated management responsibilities to ensure they are achieved.
- (c) An overview of the management structure of the rail transit agency, including:
  - (1) An organization chart;
  - (2) A description of how the safety function is integrated into the rest of the rail transit organization; and
  - (3) Clear identification of the lines of authority used by the rail transit agency to manage safety issues.

- (d) The process used to control changes to the system safety program plan, including:
  - (1) Specifying an annual assessment of whether the system safety program plan should be updated; and
  - (2) Required coordination with the oversight agency, including timeframes for submission, revision, and approval.
- (e) A description of the specific activities required to implement the system safety program, including:
  - (1) Tasks to be performed by the rail transit safety function, by position and management accountability, specified in matrices and/or narrative format; and
  - (2) Safety-related tasks to be performed by other rail transit departments, by position and management accountability, specified in matrices and/or narrative format.
- (f) A description of the process used by the rail transit agency to implement its hazard management program, including activities for:
  - (1) Hazard identification;
  - (2) Hazard investigation, evaluation and analysis;
  - (3) Hazard control and elimination;
  - (4) Hazard tracking; and
  - (5) Requirements for on-going reporting to the oversight agency relating to hazard management activities and status.
- (g) A description of the process used by the rail transit agency to ensure that safety concerns are addressed in modifications to existing systems, vehicles, and equipment, which do not require formal safety certification but which may have safety impacts.
- (h) A description of the safety certification process required by the rail transit agency to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations for New Starts and subsequent major projects to extend, rehabilitate, or modify an existing system, or to replace vehicles and equipment.
- (i) A description of the process used to collect, maintain, analyze, and distribute safety data, to ensure that the safety function within the rail transit organization receives the necessary information to support implementation of the system safety program.
- (j) A description of the process used by the rail transit agency to perform accident notification, investigation and reporting, including:
  - (1) Notification thresholds for internal and external organizations;
  - (2) Accident investigation process and references to procedures;
  - (3) The process used to develop, implement, and track corrective actions that address investigation findings;
  - (4) Reporting to internal and external organizations; and

- (5) Coordination with the oversight agency.
- (k) A description of the process used by the rail transit agency to develop an approved, coordinated schedule for all emergency management program activities, which include:
  - (1) Meetings with external agencies;
  - (2) Emergency planning responsibilities and requirements;
  - (3) Process used to evaluate emergency preparedness, such as annual emergency field exercises;
  - (4) After action reports and implementation of findings;
  - (5) Revision and distribution of emergency response procedures;
  - (6) Familiarization training for public safety organizations; and
  - (7) Employee training.
- (l) A description of the process used by the rail transit agency to ensure that planned and scheduled internal safety reviews are performed to evaluate compliance with the system safety program plan, including:
  - (1) Identification of departments and functions subject to review;
  - (2) Responsibility for scheduling reviews;
  - (3) Process for conducting reviews, including the development of checklists and procedures and the issuing of findings;
  - (4) Review of reporting requirements;
  - (5) Tracking the status of implemented recommendations; and
  - (6) Coordination with the oversight agency.
- (m) A description of the process used by the rail transit agency to develop, maintain, and ensure compliance with rules and procedures having a safety impact, including:
  - (1) Identification of operating and maintenance rules and procedures subject to review;
  - (2) Techniques used to assess the implementation of operating and maintenance rules and procedures by employees, such as performance testing;
  - (3) Techniques used to assess the effectiveness of supervision relating to the implementation of operating and maintenance rules; and
  - (4) Process for documenting results and incorporating them into the hazard management program.
- (n) A description of the process used for facilities and equipment safety inspections, including:
  - (1) Identification of the facilities and equipment subject to regular safety-related inspection and testing:

- (2) Techniques used to conduct inspections and testing;
- (3) Inspection schedules and procedures; and
- (4) Description of how results are entered into the hazard management process.
- (o) A description of the maintenance audits and inspections program, including identification of the affected facilities and equipment, maintenance cycles, documentation required, and the process for integrating identified problems into the hazard management process.
- (p) A description of the training and certification program for employees and contractors, including:
  - (1) Categories of safety-related work requiring training and certification;
  - (2) A description of the training and certification program for employees and contractors in safety-related positions;
  - (3) Process used to maintain and access employee and contractor training records; and
  - (4) Process used to assess compliance with training and certification requirements.
- (q) A description of the configuration management control process, including:
  - (1) The authority to make configuration changes;
  - (2) Process for making changes; and
  - (3) Assurances necessary for formally notifying all involved departments.
- (r) A description of the safety program for employees and contractors that incorporates the applicable local, state, and federal requirements, including:
  - (1) Safety requirements that employees and contractors must follow when working on, or in close proximity to, rail transit agency property; and
  - (2) Processes for ensuring the employees and contractors know and follow the requirements.
- (s) A description of the hazardous materials program, including the process used to ensure knowledge of and compliance with program requirements.
- (t) A description of the drug and alcohol program and the process used to ensure knowledge of and compliance with program requirements.
- (u) A description of the measures, controls, and assurances in place to ensure that safety principles, requirements and representatives are included in the rail transit agency's procurement process.

### § 659.21 System security plan: general requirements.

- (a) The oversight agency shall require the rail transit agency to implement a system security plan that, at a minimum, complies with requirements in this part and the oversight agency's program standard. The system security plan must be developed and maintained as a separate document and may not be part of the rail transit agency's system safety program plan.
- (b) The oversight agency may prohibit a rail transit agency from publicly disclosing the system security plan.

(c) After approving the system security plan, the oversight agency shall issue a formal letter of approval, including the checklist used to conduct the review, to the rail transit agency.

## § 659.23 System security plan: contents.

The system security plan must, at a minimum address the following:

- (a) Identify the policies, goals, and objectives for the security program endorsed by the agency's chief executive.
- (b) Document the rail transit agency's process for managing threats and vulnerabilities during operations, and for major projects, extensions, new vehicles and equipment, including integration with the safety certification process;
- (c) Identify controls in place that address the personal security of passengers and employees;
- (d) Document the rail transit agency's process for conducting internal security reviews to evaluate compliance and measure the effectiveness of the system security plan; and
- (e) Document the rail transit agency's process for making its system security plan and accompanying procedures available to the oversight agency for review and approval.

#### § 659.25 Annual review of system safety program plan and system security plan.

- (a) The oversight agency shall require the rail transit agency to conduct an annual review of its system safety program plan and system security plan.
- (b) In the event the rail transit agency's system safety program plan is modified, the rail transit agency must submit the modified plan and any subsequently modified procedures to the oversight agency for review and approval. After the plan is approved, the oversight agency must issue a formal letter of approval to the rail transit agency.
- (c) In the event the rail transit agency's system security plan is modified, the rail transit agency must make the modified system security plan and accompanying procedures available to the oversight agency for review, consistent with requirements specified in §659.23(e) of this part. After the plan is approved, the oversight agency shall issue a formal letter of approval to the rail transit agency.

#### § 659.27 Internal safety and security reviews.

- (a) The oversight agency shall require the rail transit agency to develop and document a process for the performance of on-going internal safety and security reviews in its system safety program plan.
- (b) The internal safety and security review process must, at a minimum:
  - (1) Describe the process used by the rail transit agency to determine if all identified elements of its system safety program plan and system security plan are performing as intended; and
  - (2) Ensure that all elements of the system safety program plan and system security plan are reviewed in an on-going manner and completed over a three-year cycle.
- (c) The rail transit agency must notify the oversight agency at least thirty (30) days before the conduct of scheduled internal safety and security reviews.

- (d) The rail transit agency shall submit to the oversight agency any checklists or procedures it will use during the safety portion of its review.
- (e) The rail transit agency shall make available to the oversight agency any checklists or procedures subject to the security portion of its review, consistent with §659.23(e).
- (f) The oversight agency shall require the rail transit agency to annually submit a report documenting internal safety and security review activities and the status of subsequent findings and corrective actions. The security part of this report must be made available for oversight agency review, consistent with §659.23(e).
- (g) The annual report must be accompanied by a formal letter of certification signed by the rail transit agency's chief executive, indicating that the rail transit agency is in compliance with its system safety program plan and system security plan.
- (h) If the rail transit agency determines that findings from its internal safety and security reviews indicate that the rail transit agency is not in compliance with its system safety program plan or system security plan, the chief executive must identify the activities the rail transit agency will take to achieve compliance.
- (i) The oversight agency must formally review and approve the annual report.

# § 659.29 Oversight agency safety and security reviews.

At least every three (3) years, beginning with the initiation of rail transit agency passenger operations, the oversight agency must conduct an on-site review of the rail transit agency's implementation of its system safety program plan and system security plan. Alternatively, the on-site review may be conducted in an ongoing manner over the three year timeframe. At the conclusion of the review cycle, the oversight agency must prepare and issue a report containing findings and recommendations resulting from that review, which, at a minimum, must include an analysis of the effectiveness of the system safety program plan and the security plan and a determination of whether either should be updated.

#### § 659.31 Hazard management process.

- (a) The oversight agency must require the rail transit agency to develop and document in its system safety program plan a process to identify and resolve hazards during its operation, including any hazards resulting from subsequent system extensions or modifications, operational changes, or other changes within the rail transit environment.
- (b) The hazard management process must, at a minimum:
  - (1) Define the rail transit agency's approach to hazard management and the implementation of an integrated system-wide hazard resolution process;
  - (2) Specify the sources of, and the mechanisms to support, the on-going identification of hazards;
  - (3) Define the process by which identified hazards will be evaluated and prioritized for elimination or control;
  - (4) Identify the mechanism used to track through resolution the identified hazard(s);
  - (5) Define minimum thresholds for the notification and reporting of hazard(s) to oversight agencies; and
  - (6) Specify the process by which the rail transit agency will provide on-going reporting of hazard resolution activities to the oversight agency.

### § 659.33 Accident notification.

- (a) The oversight agency must require the rail transit agency to notify the oversight agency within two (2) hours of any incident involving a rail transit vehicle or taking place on rail transit-controlled property where one or more of the following occurs:
  - (1) A fatality at the scene; or where an individual is confirmed dead within thirty (30) days of a rail transit-related incident;
  - (2) Injuries requiring immediate medical attention away from the scene for two or more individuals;
  - (3) Property damage to rail transit vehicles, non-rail transit vehicles, other rail transit property or facilities and non-transit property that equals or exceeds \$25,000;
  - (4) An evacuation due to life safety reasons;
  - (5) A collision at a grade crossing;
  - (6) A main-line derailment;
  - (7) A collision with an individual on a rail right of way; or
  - (8) A collision between a rail transit vehicle and a second rail transit vehicle, or a rail transit non-revenue vehicle.
- (b) The oversight agency shall require rail transit agencies that share track with the general railroad system and are subject to the Federal Railroad Administration notification requirements, to notify the oversight agency within two (2) hours of an incident for which the rail transit agency must also notify the Federal Railroad Administration.
- (c) The oversight agency shall identify in its program standard the method of notification and the information to be provided by the rail transit agency

#### § 659.35 Investigations.

- (a) The oversight agency must investigate, or cause to be investigated, at a minimum, any incident involving a rail transit vehicle or taking place on rail transit-controlled property meeting the notification thresholds identified in §659.33(a).
- (b) The oversight agency must use its own investigation procedures or those that have been formally adopted from the rail transit agency and that have been submitted to FTA.
- (c) In the event the oversight agency authorizes the rail transit agency to conduct investigations on its behalf, it must do so formally and require the rail transit agency to use investigation procedures that have been formally approved by the oversight agency.
- (d) Each investigation must be documented in a final report that includes a description of investigation activities, identified causal and contributing factors, and a corrective action plan.
- (e) A final investigation report must be formally adopted by the oversight agency for each accident investigation.
  - (1) If the oversight agency has conducted the investigation, it must formally transmit its final investigation report to the rail transit agency.

- (2) If the oversight agency has authorized an entity other than itself (including the rail transit agency) to conduct the accident investigation on its behalf, the oversight agency must review and formally adopt the final investigation report.
- (3) If the oversight agency does not concur with the findings of the rail transit agency investigation report, it must either:
  - (i) Conduct its own investigation according to paragraphs (b), (d) and (e)(1) of this section; or
  - (ii) Formally transmit its dissent to the findings of the accident investigation, report its dissent to the rail transit agency, and negotiate with the rail transit agency until a resolution on the findings is reached.
- (f) The oversight agency shall have the authority to require periodic status reports that document investigation activities and findings in a time frame determined by the oversight agency.

#### § 659.37 Corrective action plans.

- (a) The oversight agency must, at a minimum, require the development of a corrective action plan for the following:
  - (1) Results from investigations, in which identified causal and contributing factors are determined by the rail transit agency or oversight agency as requiring corrective actions; and
  - (2) Findings from safety and security reviews performed by the oversight agency.
- (b) Each corrective action plan should identify the action to be taken by the rail transit agency, an implementation schedule, and the individual or department responsible for the implementation.
- (c) The corrective action plan must be reviewed and formally approved by the oversight agency.
- (d) The oversight agency must establish a process to resolve disputes between itself and the rail transit agency resulting from the development or enforcement of a corrective action plan.
- (e) The oversight agency must identify the process by which findings from an NTSB accident investigation will be evaluated to determine whether or not a corrective action plan should be developed by either the oversight agency or rail transit agency to address NTSB findings.
- (f) The rail transit agency must provide the oversight agency:
  - (1) Verification that the corrective action(s) has been implemented as described in the corrective action plan, or that a proposed alternate action(s) has been implemented subject to oversight agency review and approval; and
  - (2) Periodic reports requested by the oversight agency, describing the status of each corrective action(s) not completely implemented, as described in the corrective action plan.
- (g) The oversight agency must monitor and track the implementation of each approved corrective action plan.

### § 659.39 Oversight agency reporting to the Federal Transit Administration.

- (a) Initial submission. Each designated oversight agency with a rail fixed guideway system that is in passenger operations as of April 29, 2005 or will begin passenger operations by May 1, 2006, must make its initial submission to FTA by May 1, 2006. In states with rail fixed guideway systems initiating passenger operations after May 1, 2006, the designated oversight agency must make its initial submission within the time frame specified by the state in its designation submission, but not later than at least sixty (60) days prior to initiation of passenger operations. Any time a state changes its designated oversight agency to carry out the requirements identified in this part; the new oversight agency must make a new initial submission to FTA within thirty (30) days of the designation.
- (b) An initial submission must include the following:
  - (1) Oversight agency program standard and referenced procedures; and
  - (2) Certification that the system safety program plan and the system security plan have been developed, reviewed, and approved.
- (c) Annual submission. Before March 15 of each year, the oversight agency must submit the following to FTA:
  - (1) A publicly available annual report summarizing its oversight activities for the preceding twelve months, including a description of the causal factors of investigated accidents, status of corrective actions, updates and modifications to rail transit agency program documentation, and the level of effort used by the oversight agency to carry out its oversight activities.
  - (2) A report documenting and tracking findings from three-year safety review activities, and whether a three-year safety review has been completed since the last annual report was submitted.
  - (3) Program standard and supporting procedures that have changed during the preceding year.
  - (4) Certification that any changes or modifications to the rail transit agency system safety program plan or system security plan have been reviewed and approved by the oversight agency.
- (d) Periodic submission. FTA retains the authority to periodically request program information.
- (e) Electronic reporting. All submissions to FTA required in this part must be submitted electronically using a reporting system specified by FTA.

#### § 659.41 Conflict of interest.

The oversight agency shall prohibit a party or entity from providing services to both the oversight agency and rail transit agency when there is a conflict of interest, as defined by the state.

#### § 659.43 Certification of compliance.

- (a) Annually, the oversight agency must certify to the FTA that it has complied with the requirements of this part.
- (b) The oversight agency must submit each certification electronically to FTA using a reporting system specified by FTA.
- (c) The oversight agency must maintain a signed copy of each annual certification to FTA, subject to audit by FTA.

### **Appendix C: 49 United States Code Section 5329(e)**

- (e) STATE SAFETY OVERSIGHT PROGRAM.—
- (1) APPLICABILITY.—This subsection applies only to eligible States.
- (2) DEFINITION.—In this subsection, the term 'eligible State' means a State that has—
- (A) a rail fixed guideway public transportation system within the jurisdiction of the State that is not subject to regulation by the Federal Railroad Administration; or (B) a rail fixed guideway public transportation system in the engineering or construction phase of development within the jurisdiction of the State that will not be subject to regulation by the Federal Railroad Administration.
- (3) IN GENERAL.—In order to obligate funds apportioned under section 5338 to carry out this chapter, effective 3 years after the date on which a final rule under this subsection becomes effective, an eligible State shall have in effect a State safety oversight program approved by the Secretary under which the State—
- (A) assumes responsibility for overseeing rail fixed guideway public transportation safety; (B)
- adopts and enforces Federal and relevant State laws on rail fixed guideway public transportation safety;
- (C) establishes a State safety oversight agency;
- (D) determines, in consultation with the Secretary, an appropriate staffing level for the State safety oversight agency that is commensurate with the number, size, and complexity of the rail fixed guideway public transportation systems in the eligible State;
- (E) requires that employees and other designated personnel of the eligible State safety oversight agency who are responsible for rail fixed guideway public transportation safety oversight are qualified to perform such functions through appropriate training, including successful completion of the public transportation safety certification training program established under subsection (c); and
- (F) prohibits any public transportation agency from providing funds to the State safety oversight agency or an entity designated by the eligible State as the State safety oversight agency under paragraph (4).
- (4) STATE SAFETY OVERSIGHT AGENCY.—
- (A) IN GENERAL.—Each State safety oversight program shall establish a State safety oversight agency that—
- (i) is financially and legally independent from any public transportation entity that the State safety oversight agency oversees;
- (ii) does not directly provide public transportation services in an area with a rail fixed guideway public transportation system subject to the requirements of this section;
- (iii) does not employ any individual who is also responsible for the administration of rail fixed guideway public transportation programs subject to the requirements of this section;
- (iv) has the authority to review, approve, oversee, and enforce the implementation by the rail fixed guideway public transportation agency of the public transportation agency safety plan required under subsection (d);

- (v) has investigative and enforcement authority with respect to the safety of rail fixed guideway public transportation systems of the eligible State;
- (vi) audits, at least once triennially, the compliance of the rail fixed guideway public transportation systems in the eligible State subject to this subsection with the public transportation agency safety plan required under subsection (d); and
- (vii) provides, at least once annually, a status report on the safety of the rail fixed guideway public transportation systems the State safety oversight agency oversees to—
- (I) the Federal Transit Administration;
- (II) the Governor of the eligible State; and
- (III) the board of directors, or equivalent entity, of any rail fixed guideway public transportation system that the State safety oversight agency oversees.
- (B) WAIVER.—At the request of an eligible State, the Secretary may waive clauses (i) and (iii) of subparagraph (A) for eligible States with 1 or more rail fixed guideway systems in revenue operations, design, or construction, that—
- (i) have fewer than 1,000,000 combined actual and projected rail fixed guideway revenue miles per year; or
- (ii) provide fewer than 10,000,000 combined actual and projected unlinked passenger trips per year.
- (5) PROGRAMS FOR MULTI-STATE RAIL FIXED GUIDEWAY PUBLIC TRANSPORTATION SYSTEMS.—An eligible State that has within the jurisdiction of the eligible State a rail fixed guideway public transportation system that operates in more than 1 eligible State shall—
- (A) jointly with all other eligible States in which the rail fixed guideway public transportation system operates, ensure uniform safety standards and enforcement procedures that shall be in compliance with this section, and establish and implement a State safety oversight program approved by the Secretary; or
- (B) jointly with all other eligible States in which the rail fixed guideway public transportation system operates, designate an entity having characteristics consistent with the characteristics described in paragraph (3) to carry out the State safety oversight program approved by the Secretary.

#### (6) GRANTS.—

(A) IN GENERAL.—The Secretary shall make grants to eligible States to develop or carry out State safety oversight programs under this subsection. Grant funds may be used for program operational and administrative expenses, including employee training activities.

#### (B) APPORTIONMENT.—

- (i) FORMULA.—The amount made available for State safety oversight under section 5336(h) shall be apportioned among eligible States under a formula to be established by the Secretary. Such formula shall take into account fixed guideway vehicle revenue miles, fixed guideway route miles, and fixed guideway vehicle passenger miles attributable to all rail fixed guideway systems not subject to regulation by the Federal Railroad Administration within each eligible State.
- (ii) ADMINISTRATIVE REQUIREMENTS.—Grant funds apportioned to States under this paragraph shall be subject to uniform administrative requirements for grants and cooperative agreements to State and local governments under part 18 of title 49, Code of Federal Regulations, and shall be subject to the requirements of this chapter as the Secretary determines appropriate.

#### (C) GOVERNMENT SHARE.—

- (i) IN GENERAL.—The Government share of the reasonable cost of a State safety oversight program developed or carried out using a grant under this paragraph shall be 80 percent.
- (ii) IN-KIND CONTRIBUTIONS.—Any calculation of the non-Government share of a State safety oversight program shall include in-kind contributions by an eligible State.
- (iii) NON-GOVERNMENT SHARE.—The non-Government share of the cost of a State safety oversight program developed or carried out using a grant under this paragraph may not be met by—
- (I) any Federal funds;
- (II) any funds received from a public transportation agency; or
- (III) any revenues earned by a public transportation agency.
- (iv) SAFETY TRAINING PROGRAM.—Recipients of funds made available to carry out sections 5307 and 5311 may use not more than 0.5 percent of their formula funds to pay not more than 80 percent of the cost of participation in the public transportation safety certification training program established under subsection (c), by an employee of a State safety oversight agency or a recipient who is directly responsible for safety oversight.

#### (7) CERTIFICATION PROCESS.—

- (A) IN GENERAL.—Not later than 1 year after the date of enactment of the Federal Public Transportation Act of 2012, the Secretary shall determine whether or not each State safety oversight program meets the requirements of this subsection and the State safety oversight program is adequate to promote the purposes of this section.
- (B) ISSUANCE OF CERTIFICATIONS AND DENIALS.—The Secretary shall issue a certification to each eligible State that the Secretary determines under subparagraph (A) adequately meets the requirements of this subsection, and shall issue a denial of certification to each eligible State that the Secretary determines under subparagraph (A) does not adequately meet the requirements of this subsection.
- (C) DISAPPROVAL.—If the Secretary determines that a State safety oversight program does not meet the requirements of this subsection and denies certification, the Secretary shall transmit to the eligible State a written explanation and allow the eligible State to modify and resubmit the State safety oversight program for approval.
- (D) FAILURE TO CORRECT.—If the Secretary determines that a modification by an eligible State of the State safety oversight program is not sufficient to certify the program, the Secretary—
- (i) shall notify the Governor of the eligible State of such denial of certification and failure to adequately modify the program, and shall request that the Governor take all possible actions to correct deficiencies in the program to ensure the certification of the program; and
- (ii) may-
- (I) withhold funds available under paragraph (6) in an amount determined by the Secretary;
- (II) withhold not more than 5 percent of the amount required to be appropriated for use in a State or urbanized area in the State under section 5307 of this title, until the State safety oversight program has been certified; or
- (III) require fixed guideway public transportation systems under such State safety oversight program to provide up to 100 percent of Federal assistance made available under this chapter only for safety-related improvements on such systems, until the State safety oversight program has been certified.

- (8) EVALUATION OF PROGRAM AND ANNUAL REPORT.—The Secretary shall continually evaluate the implementation of a State safety oversight program by a State safety oversight agency, and shall submit on or before July 1 of each year to the Committee on Banking, Housing, and Urban Affairs of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report on—
- (A) the amount of funds apportioned to each eligible State; and
- (B) the certification status of each State safety oversight program, including what steps a State program that has been denied certification must take in order to be certified.
- (9) FEDERAL OVERSIGHT.—The Secretary shall—
- (A) oversee the implementation of each State safety oversight program under this subsection;
- (B) audit the operations of each State safety oversight agency at least once triennially; and
- (C) issue rules to carry out this subsection.

### **Appendix D: SSPP & SEPP Review and Approval Checklists**

### Sample Checklist for Reviewing the System Safety Program Plan

Rail Transit Agency (RTA)		
State Oversight Agency Reviewer	Date	

#	CHECKLIST	PLAN REQUIREMENTS	INCLUDED	PAGE	COMMENTS
	ITEM	Does the PLAN contain or provide for the following:	Yes — No	REF.	
1.	Policy Statement	<ul> <li>A policy statement is developed for the System Safety Program Plan (SSPP).</li> </ul>			
		<ul> <li>The policy statement describes the authority that establishes the SSPP.</li> </ul>			
		<ul> <li>The policy statement is signed and endorsed by the rail transit agency's chief executive.</li> </ul>			
2.	Purpose, Goals	The purpose of the SSPP is defined.			
	and Objectives	<ul> <li>Goals are identified to ensure that the SSPP fulfills its purpose.</li> </ul>			
		<ul> <li>Objectives are identified to monitor and assess the achievement of goals.</li> </ul>			
		<ul> <li>Stated management responsibilities are identified for the safety program to ensure that the goals and objectives are achieved.</li> </ul>			

#	CHECKLIST	PLAN REQUIREMENTS	INCLUDED	PAGE	COMMENTS
	ITEM	Does the PLAN contain or provide for the following:	Yes — No	REF.	
3.	Management Structure	<ul> <li>An overview of the management structure of the rail transit agency is provided including an organization chart.</li> </ul>			
		<ul> <li>Organizational structure is clearly defined and includes:</li> <li>History and scope of service,</li> <li>Physical characteristics, and</li> <li>Operations and Maintenance.</li> </ul>			
		<ul> <li>A description of how the safety function is integrated into the rest of the rail transit organization is provided.</li> </ul>			
		<ul> <li>Clear identification of the lines of authority used by the rail transit agency to manage safety issues is provided.</li> </ul>			
4.	Plan Review and Modification	<ul> <li>An annual assessment of whether the SSPP should be updated is specified.</li> <li>The process used to control changes to the SSPP is described.</li> <li>Specific departments and persons responsible for initiating, developing, approving, and issuing changes to the SSPP are identified.</li> </ul>			
		<ul> <li>Required coordination with the oversight agency regarding plan modification, including timeframes for submission, revision, and approval, is addressed.</li> </ul>			

#	CHECKLIST	PLAN REQUIREMENTS	INCLUDED	PAGE	COMMENTS
	ITEM	Does the PLAN contain or provide for the following:	Yes — No	REF.	
5.	Plan Implementation	<ul> <li>A description of the specific activities required to implement the SSPP is included.</li> </ul>			
		<ul> <li>Tasks to be performed by the rail transit safety function, by position and management accountability, are identified and described.</li> </ul>			
		<ul> <li>A description of the methodologies used by the system safety function to achieve their safety responsibilities should be provided.</li> </ul>			
		<ul> <li>Safety-related tasks to be performed by other rail transit departments, by position and management accountability, are identified and described.</li> </ul>			
		<ul> <li>A task matrix (or an equivalent narrative description) showing: all identified safety responsibilities, interfaces among all rail transit units responsible for each task, and the key reports or actions required, should be provided.</li> </ul>			
6.	Hazard Management Process	The process used by the rail transit agency to implement its hazard management program, including the role of the oversight agency in providing on-going communication, is described.			
		The hazard management process includes activities for: hazard identification, hazard investigation, evaluation, and analysis, hazard control and elimination, hazard tracking.			
		<ul> <li>Requirements for on-going reporting to the oversight agency relating to hazard management activities and status are specified.</li> </ul>			
7.	Safety Certification Process	A description of the safety certification process required by the rail transit agency to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations for New Starts and subsequent major projects to extend, rehabilitate, or modify an existing system, or to replace vehicles and equipment.			

#	CHECKLIST ITEM	PLAN REQUIREMENTS  Does the PLAN contain or provide for the following:	INCLUDED Yes — No	PAGE REF.	COMMENTS
8.	System Modifications	The process used by the rail transit agency to ensure that safety concerns are addressed in modifications to existing systems, vehicles, and equipment, which do not require formal safety certification, but which may have safety impacts, is described.			
9.	Safety Data Acquisition	<ul> <li>The process used to collect, maintain, analyze, and distribute safety data is clearly defined.</li> </ul>			
		The management process for ensuring that the safety function within the rail transit organization receives the necessary information to support implementation of the system safety program is clarified.			
10.	Incident Notification, Investigation,	<ul> <li>A description is provided regarding the process used by the rail transit agency to perform accident notification, investigation and reporting.</li> </ul>			
	and Reporting	<ul> <li>Criteria for determining what accidents/incidents require investigation, and who is responsible to conduct specific investigations are developed.</li> </ul>			
		A description of the procedures for performing investigations, including proper documentation and reporting of findings, conclusions reached, use of hazard resolution process to develop corrective action recommendations, and follow-up to verify corrective action implementation is provided.			
		<ul> <li>Notification thresholds for internal departments/functions are defined.</li> </ul>			
		<ul> <li>Criteria are specified for notifying external agencies (NTSB, state oversight agency) of accidents and incidents.</li> </ul>			
		<ul> <li>Procedures are established for documenting and reporting on accident investigations.</li> </ul>			
		<ul> <li>Process used to develop, implement, and track corrective actions that address investigation findings is specified.</li> <li>Coordination with the oversight agency is specified.</li> </ul>			

#	CHECKLIST	PLAN REQUIREMENTS	INCLUDED	PAGE	COMMENTS
"	ITEM	Does the PLAN contain or provide for the following:	Yes — No	REF.	CONNICTO
11.	Emergency Management	The agency's emergency planning responsibilities and requirements are identified.	100 110	11211	
	Program	<ul> <li>A description of the process used by the rail transit agency to develop an approved, coordinated schedule for emergency management program activities is provided.</li> </ul>			
		<ul> <li>Required meetings with external agencies regarding the emergency management program are specified.</li> </ul>			
		<ul> <li>The process used to evaluate emergency preparedness, such as annual emergency field exercises, is documented.</li> </ul>			
		<ul> <li>After action reports and implementation of findings are required.</li> </ul>			
		<ul> <li>The process is explained to be used by the rail transit agency for the revision and distribution of emergency response procedures.</li> </ul>			
		<ul> <li>The agency's responsibilities for providing employee training are identified.</li> </ul>			
		<ul> <li>The agency's responsibilities for providing familiarization training to local public safety organizations are identified.</li> </ul>			

#	CHECKLIST	PLAN REQUIREMENTS	INCLUDED	PAGE	COMMENTS
"	ITEM	Does the PLAN contain or provide for the following:	Yes — No	REF.	0021110
12.	Internal Safety Audit Program	<ul> <li>A description of the process used by the rail transit agency to ensure that planned and scheduled internal safety audits are performed to evaluate compliance with the SSPP is included.</li> </ul>			
		<ul> <li>Identification of departments and functions subject to audit is performed.</li> </ul>			
		<ul> <li>Auditors must be independent from the first line of supervision responsible for the activity being audited.</li> </ul>			
		<ul> <li>A three-year audit schedule must be developed, reviewed, maintained and updated to ensure that all 21 SSPP elements are reviewed during the audit cycle.</li> </ul>			
		<ul> <li>The process for conducting audits, including the development of checklists, and procedures for conducting audits and issuing of findings is described.</li> </ul>			
		■ The SSPP must describe the requirement of an annual audit report that summarizes the results of individual audits performed during the previous year and includes the status of required corrective action items. This report must be submitted to the state oversight agency for review and approval.			
		<ul> <li>The process for resolving problems and disagreements, report distribution, and followup on corrective action procedures is described.</li> </ul>			
		The ISAP process and reporting must be coordinated with the state oversight agency.			
		<ul> <li>The ISAP process should be comprehensive.</li> </ul>			

#	CHECKLIST	PLAN REQUIREMENTS	INCLUDED	PAGE	COMMENTS
"	ITEM	Does the PLAN contain or provide for the following:	Yes — No	REF.	COMMENTS
13.	Rules Compliance	<ul> <li>Operating and maintenance rules and procedures that affect safety are identified.</li> </ul>			
		<ul> <li>Operating and maintenance rules and procedures that affect safety are reviewed for their effectiveness and determinations are made regarding their need to be updated.</li> </ul>			
		<ul> <li>Description of process for developing, maintaining, and ensuring compliance with operating and maintenance rules and procedures.</li> </ul>			
		<ul> <li>Techniques used to assess the implementation of operating and maintenance rules and procedures by employees, such as performance testing/compliance checks.</li> </ul>			
		<ul> <li>Techniques used to assess the effectiveness of supervision relating to the implementation of operating and maintenance rules.</li> </ul>			
		<ul> <li>Process for documenting results and incorporating them into the hazard management program.</li> </ul>			
14.	Facilities and Equipment	<ul> <li>Identification of the facilities and equipment that are subject to regular safety related inspection and testing is provided.</li> </ul>			
	Inspections	<ul> <li>A description of how safety-related equipment and facilities are included in a regular inspection and testing program is provided.</li> </ul>			
		<ul> <li>Use of a written checklist for conducting facility inspections.</li> </ul>			
		<ul> <li>Descriptions of how identified hazardous conditions are entered into the Hazard Resolution Process.</li> </ul>			
15.	Maintenance Audit and Inspection Program	<ul> <li>A list of systems and facilities subject to a maintenance program, along with established maintenance cycle and required documentation of maintenance performed for each item, is provided.</li> </ul>			
		<ul> <li>A description of the process for tracking and resolving problems identified during inspections is provided.</li> </ul>			
		<ul> <li>Use of a written checklist for conducting maintenance audits is required.</li> </ul>			

#	CHECKLIST	PLAN REQUIREMENTS	INCLUDED	PAGE	COMMENTS
	ITEM	Does the PLAN contain or provide for the following:	Yes — No	REF.	
16.	Training and Certification	<ul> <li>A description of the training and certification program for employees and contractors is provided.</li> </ul>			
	Program	<ul> <li>Categories of safety-related work requiring training and certification are identified.</li> </ul>			
		<ul> <li>Description of the training and certification program for employees and contractors in safety-related positions is provided.</li> </ul>			
		<ul> <li>Description of the training and certification program for contractors is provided.</li> </ul>			
		<ul> <li>The process used to maintain and access employee and contractor training records is described.</li> </ul>			
		<ul> <li>The process used to assess compliance with training and certification requirements is described.</li> </ul>			
17.	Configuration Management Process	<ul> <li>A description of the configuration management control process is provided and appropriate references are made to other rail transit agency documents governing this process.</li> </ul>			
		<ul> <li>Process for making changes is described.</li> </ul>			
		<ul> <li>Authority to make configuration changes is described and assurances are provided for formal notification of all involved departments.</li> </ul>			
18.	Compliance with Local, State and	<ul> <li>A description of the safety program for employees and contractors that incorporates the applicable local, state, and federal requirements is provided.</li> </ul>			
	Federal Safety Requirements	<ul> <li>Safety requirements that employees and contractors must follow when working on, or in close proximity to, rail transit agency controlled property are identified.</li> </ul>			
		<ul> <li>Processes for ensuring the employees and contractors know and follow the requirements are described.</li> </ul>			
19.	Hazardous Materials Program	<ul> <li>A description of the hazardous materials program, including the process used to ensure knowledge of and compliance with program requirements is provided.</li> </ul>			

#	CHECKLIST	PLAN REQUIREMENTS	INCLUDED	PAGE	COMMENTS
	ITEM	Does the PLAN contain or provide for the following:	Yes — No	REF.	
20.	Drug and Alcohol Program	<ul> <li>A description of the drug and alcohol program and the process used to ensure knowledge of and compliance with program requirements is provided.</li> </ul>			
21.	Procurement	<ul> <li>A description of the measures, controls, and assurances in place to ensure that safety principles, requirements, and representatives are included in the rail transit agency procurement process.</li> </ul>			

### Sample Checklist for Reviewing the System Security and Emergency Preparedness Plan(s)

Date	
	Date

#	CHECKLIST		PLAN REQUIREMENTS	INCLUDED	PAGE	COMMENTS
	ITEM		Does the PLAN contain or provide for the following:	Yes — No	REF.	
1	Policy Statement	0	A policy statement should be developed for the System Security and Emergency Preparedness Plan(s) (SEPP).			
		0	The policy statement should describe the authority that establishes the SEPP, including statutory requirements and the rail transit agency's relationship with the oversight agency.			
		0	The policy statement is signed and endorsed by the rail transit agency's chief executive.			
1.1	Purpose	0	The SEPP should identify the purpose of the security program endorsed by the agency's chief executive.			
		0	The SEPP should introduce the concept of "system security."			
		0	The SEPP introduces the concept of "emergency preparedness."			
1.2	Goals and Objectives	0	The SEPP should identify the goals of the SEPP program endorsed by the agency's chief executive.			
		0	The SEPP should identify the objectives of the SEPP program endorsed by the agency's chief executive.			
1.3	Scope	0	Describe the scope of the SEPP and Program.			
1.4	Security and Law Enforcement	0	Describe the security and law enforcement functions that manage and support implementation of the SEPP.			
1.5	Management Authority and Legal Aspects	0	Describe the authority which oversees the operation and management of the rail transit agency, including its security/police function.			
1.6	Government Involvement	0	Describe how the SEPP interfaces with local, state and federal authorities to ensure security and emergency preparedness for the system.			

#	CHECKLIST ITEM		PLAN REQUIREMENTS  Does the PLAN contain or provide for the following:	INCLUDED Yes — No	PAGE REF.	COMMENTS
1.7	Security Acronyms and Definitions	0	Provide a listing of acronyms and definitions used in the SEPP.	163 - 140	IXLI .	
2.1	Background and History	0	A description of the agency including general overview, a brief history and scope of rail transit services provided.			
2.2	Organizational Structure	0	Organizational charts showing the lines of authority and responsibility as they relate to security and emergency preparedness.			
2.3	Human Resources	0	Provide a categorization and break-down of all employees and contractors who work for/on the rail transit agency			
2.4	Passengers	0	Provide a description of the rail transit agency's ridership.			
2.5	Services and Operations	0	Describe the rail transit agency's operations and services.			
2.6	Operating Environment	0	Describe the rail transit agency's operating environment.			
2.7	Integration with Other Plans	0	Describe how the SEPP integrates with other plans and programs maintained by the rail transit agency.			
2.8	Current Security Conditions	0	Description of the current security conditions at the rail transit agency and the types of security incidents experienced by the transit system and their frequency of occurrence.			
2.9	Capabilities and Practices	0	Summary description of methods and procedures, devices, and systems utilized to prevent or minimize security breaches, including passenger education, campaigns, delay, detection, and assessment devices, and others that may be applicable.			
3.1	Responsibility for Mission Statement	0	Identification of the person(s) responsible for establishing a transit system security and emergency preparedness policy and for developing and approving the SEPP.			
3.2	Management of the SEPP Program	0	Identification of the person(s) with overall responsibility for transit security and emergency preparedness, including day-to-day operations, SEPP-related internal communications, liaison with external organizations, and identifying and resolving SEPP-related concerns.			

#	CHECKLIST		PLAN REQUIREMENTS	INCLUDED	PAGE	COMMENTS
	ITEM		Does the PLAN contain or provide for the following:	Yes — No	REF.	
3.3	Division of	0	Listing of SEPP-related responsibilities of the personnel who work			
	Security		within the transit agency security/police function.			
	Responsibility	0	Listing of SEPP-related responsibilities of other			
			departments/functions, including their relationship to the			
			security/police function.			
		0	Listing of security-related responsibilities for other (non-security/police) rail transit agency employees, including their relationship to			
			the employee's other duties.			
		0	A SEPP Program Roles and Responsibilities Matrix should be			
			developed showing interfaces with other transit system			
			departments/functions and the key reports or actions required.			
		0	The responsibilities of external agencies for supporting SEPP development and implementation should be identified.			
		0	The committees developed by the rail transit agency to address security issues should be identified.			
4.1	Planning	0	Identification of SEPP activities and programs in place at the rail			
			transit agency to support planning for system security and			
			emergency preparedness.			
4.2	Organization	0	Identification of the organization of SEPP-related activities and			
			programs and the ability to coordinate with external response			
1.0			agencies.			
4.3	Equipment	0	Description of the equipment used to support implementation of the SEPP program.			
4.4	Tankain a and					
4.4	Training and Procedures	0	Description of SEPP-related training and procedures available to ensure employee proficiency			
1.5			Description of SEPP-related activities to ensure the conduct of			
4.5	Exercises and Evaluation	0	emergency exercises and evaluation.			
5.1	Threat and		Description of the rail transit agency's activities to identify security			
3.1	Vulnerability	0	and terrorism-related threats and vulnerabilities.			
	Identification		and terromonical invalid and validabilities.			
5.2	Threat and	0	Description of the rail transit agency's activities to assess the likely			
	Vulnerability		impacts of identified threats and vulnerabilities on the system and			
	Assessment		to identify particular vulnerabilities which require resolution.			

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#	CHECKLIST ITEM		PLAN REQUIREMENTS  Does the PLAN contain or provide for the following:	INCLUDED Yes — No	PAGE REF.	COMMENTS
5.3	Threat and Vulnerability Resolution	0	Description of how response strategies (both short- or long-term strategies) are developed for prioritized vulnerabilities, including the decision process used to determine whether to eliminate, mitigate, or accept security problems	165 — NO	KEF.	
6.1	Required Tasks for Goals and Objectives	0	Identification of tasks to be performed to implement the goals and supporting objectives required to implement the SEPP.			
6.2	Task Schedule	0	General schedule with specific milestones for implementation of the security program, threat and vulnerability analyses, staff security training, and regular program reviews during the implementation process.			
6.3	Evaluation	0	Description of the types of internal management reviews to be conducted, the frequencies of the reviews, and the person(s) responsible.			
7.1	Initiation of SEPP Revisions	0	Description of process used to initiate revisions to the SEPP, gather input for the revisions, procedures for updating the SEPP, and identification of responsible person(s).			
7.2	Review Process	0	Description of the process used to review and revise the SEPP as necessary, including frequency of reviews, and responsible person(s).			
7.3	Implement Modifications	0	Description of process used to communicate and disseminate new and revised procedures and other elements of the SEPP to appropriate transit agency staff.			